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IMPRESUM

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EDITORIAL

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2. The submission file is in OpenOffice, Microsoft Word, RTF, or WordPerfect document file format.
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Check that the manuscript has been written and styled in accordance with the Journal style; that it carries an abstract (if applicable), keywords, correct reference system etc. and check that the correct blinding system has been used. If anything is missing ask the author to complete it before the manuscript is sent out for review.

The manuscript is sent out for review. The reviewer reads and evaluates the manuscript and eventually sends a review report to the Chief Editor. The time for review can be set to 2-6 weeks depending on the discipline (more time is usually given to papers in the humanities and social sciences). Make sure to provide the reviewer with clear instructions for the work, e.g. outlined in the form of a Review report or a number of questions to be considered.

Based on the reviewers' comments the Chief Editor makes a decision to:

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- Accept after revision
- Ask authors to resubmit
- Reject

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After review a manuscript goes to the Copy Editor who will correct the manuscript concerning the correct referencing system, confirmation with the journal style and layout. When Copy Editor finishes his/her work they send manuscripts to the Layout editor.

Layout Editor is responsible for structuring the original manuscript, including figures and tables, into an article, activating necessary links and preparing the manuscript in the various formats, in our case PDF and HTML format. When Layout Editor finishes his/her job they send manuscripts to Proof Editor.

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Our first issue has 17 articles (8 original research and 9 studies and article). Our future plan is to increase the number of quality research papers from all fields of science, engineering and education. The editors seek to publish articles from a wide variety of academic disciplines and substantive fields; they are looking forward to substantial improvement of educational processes and outcomes.

Editor in Chief
Dr. Lazar Stošić

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FEATURES OF COMMUNICATIVE SPHERE OF PRESCHOOL CHILDREN COLLABORATIVE THINKING ACTIVITY

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Abstract: This article presents research devoted to the issues of the collaborative thinking activity in preschool age. The approach to the study of the collaborative thinking activity as a system that operates on different levels is shown. There is a detailed analysis of the communicative sphere of preschool children collaborative thinking activity provided in the form of some of the characteristics of dialogue.

Keywords: collaborative thinking activity, spheres of collaborative thinking activity, communicative sphere of collaborative thinking activity, dialogue.

Theoretical analysis of the literature indicates that a study of the collaborative thinking activity affects a wide range of issues connected with the certain peculiarities of the participants' functioning in the collaborative thinking activity. For example, it addresses such issues as: the reflexive abilities of the collaborative thinking activity participants [7], the analysis of the sense formation in the individual and collaborative solutions of the cognitive tasks [6]; sense transfer means in the collaborative thinking activity [9]; choice of the functional roles of participants in collaborative thinking activity [5]; individual personality traits of the collaborative thinking activity participants [4] and others. Studies of the collaborative thinking activity, as a system that operates on different levels, are quite rare [2].

We have attempted to study the collaborative thinking activity as a system in the unity of its constituent elements, levels, spheres. Considering the collaborative activity as a system one can identify its constituent elements or subsystems. In the terminology of A.V. Rastyannikov, S. J. Stepanov, D. V. Ushakov in the collaborative activity one can single out spheres [7]. A.K. Belousova writes about the levels of the existence of the collaborative thinking activity [2]. I. N. Semenov identifies the hierarchically organized levels in the structure of the thought process [8]. Integrating the research data, we represent an experimental model of the preschool children collaborative thinking activity:

1) Intellectual sphere - a sphere of transformation (development, decision or finding the answer, etc.) of the subject content of the collaborative creative work associated with the performance of various operations by the subjects.

2) Personal sphere is shown, on the one hand, in the conceptions of the group subjects on their abilities to solve the problem, on the other - in the personal self-expression of the group members. The personal sphere of the collaborative thinking activity can be represented by the personal qualities of the interaction subjects, complicating the process of communication and cooperation.

3) Communicative sphere includes the aspects of the subjects' communication, including the ways of understanding and building the relationships among the participants. Communicative sphere of preschool children may also be presented by the

peculiarities of the dialogue in the process of problem solving.

4) Cooperative sphere - these are the ways of group members' cooperation, embodied in a various organizational forms, as well as the functions that the participants perform in the collaborative thinking activity, taking on this or that role.

From this perspective, we studied the collaborative thinking activity of preschool children in the unity of its constituent spheres. The aim of this study - the analysis of the identified features of the cooperative sphere of the preschool children collaborative thinking activity. 84 children of the preschool age took part in the experiment - 44 girls and 40 boys. The average age of the subjects - 6.5 years. Preschoolers were asked to choose a couple and to solve the puzzle together. Thus were formed and studied 58 dyads. In addition to the experiment and the method of reasoning out loud, in order to study the features of the communicative sphere of the collaborative thinking activity, the method by G. M. Kuczynsky has been applied, allowing to identify the characteristics of the external dialogue of the preschool children in the collaborative thinking activity. We analyzed 2315 speech utterances of the preschoolers. We identified forms of addresses to the partners of collaborative thinking activity: 1119 statements (48.3%), 761 questions (32.9%), 435 incentives to action (18.8%). To obtain the objective rates of the characteristics of the communicative sphere of the collaborative thinking activity, the coefficient of the communicative richness (R) by E. V. Tsukanova [10] was calculated. In order to calculate the significance of differences at the level of the studied characteristics we used the nonparametric statistical criteria of H-criteria of Kruskal-Wallis test.

Thus, the study identified a number of important characteristics of the communicative sphere of preschool children collaborative thinking activity:

1. 48.3% of the total number of addresses in the collaborative thinking activity of the preschoolers were statements. Despite the fact that at the preschool age there is a pronounced focus on the peer and the pursuit of the collaborative decision, the statements in the process of the collaborative thinking activity are often short, non-deployed, externally non-directed at the peer, untargeted.

2. The questions asked by the preschoolers in the process of the collaborative problem solving, in 50% of cases remain unanswered. We can assume that some of these questions relate to the so-called "false" questions, i.e. questions that do not require an answer. Preschoolers answer the questions if they are targeted (for example, the name of the communication partner was said) or, if a child insists on the answer (for example, by repeating the question several times).

3. Incentives to action in the structure of the preschool children communication in the collaborative thinking activity are presented in the least quantity. However, they differ in the outstanding targeting, orientation, expressiveness. While the incentive to action can have several forms (offer to act in a certain way, command and request), in preschool age the incentive to action is primarily in the form of the command.

4. A large number of preschoolers' addresses are unanswered by the communication partners, i.e. do not form cycles. So, 561 statements, 341 questions and 249 incentives to action did not form cycles, i.e. they appear to be in the form of monologue speech or internal dialogue (see Fig. 1.).

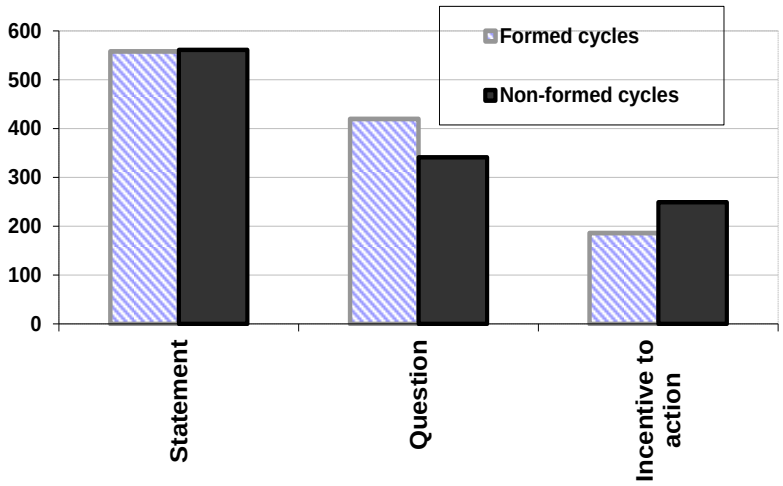

Figure 1. The quantitative ratio of addresses that formed and did not form the cycles

5. The greatest quantity of cycles is devoted to the discussion of the substantive actions of the interaction subjects or to the verbal acts of the partners, i.e. procedural. It has been observed, the more successful collaboration and productive process of problem solving, the more the subject cycles, i.e. cycles with the theme of the subject, which discusses the task or conditions of the task. A distinctive feature of the preschoolers' dialogues is a small amount of the personal cycles, i.e. cycles, which discuss the subjects of the communication and their relationship, despite the fact that the couples were formed on the basis of mutual positive choices. This can be explained by the fact that in the elder preschool age the cooperation is directed at the business relationships, and a peer is considered by the preschooler in terms of capacity and capabilities to meet their needs in the communication.

6. Calculation of the coefficient of the communicative richness by E.V. Tsukanova lets us divide the studied dyad into 4 groups with different value of the coefficient: Group 1 - R = 0.2 to 1, minimum low coefficient of the communicative richness, Group 2 - R = 1 to 2, low coefficient of the communicative richness, Group 3 - R = 2.13 to 5.25, average coefficient of the communicative richness, Group 4 - R = 6.3 to 24, high coefficient of the communicative richness;

These groups showed the statistically significant differences in the intensity indices of the dialogue that characterize the communicative sphere of the collaborative thinking activity of the preschool children (see Table 1)

Table 1. The significance of differences in the intensity indices of the dialogue in groups of preschoolers with different communicative richness coefficient

Feature	**p=0,01**	**p=0,05**
Statements	Differences are not significant	
Questions	H=11,502	
Incentives to action	H= 22,970	
Cycle of statement - attitude towards it		H=8,217
Cycle of question -		H=12,712

answer	
Cycle of incentive to action - implementation	H=14,576
Complex cycles	H=17,652
Subject theme of cycles	H=10,460
Procedural theme of cycles	Differences are not significant
Personal theme of cycles	H=15,112
Work time of dyad	H=14,439

As a result of using this criterion was identified the significance of the difference in the groups of preschool children with the different communicative richness coefficient for all the features, except for the statement and procedural theme cycles.

Thus, the analysis of the objective characteristics of the preschool children communication in the collaborative thinking activity allowed to identify the following: 1) from the total number of the speech utterances, 49.7% is monologue speech (in the form of external or internal dialogue); 2) Cycles of the dialogue formed to a large extent the questions, rather than statements and incentives to action. The presence of the question-answer cycles favor the formation at the preschool age of the intellectual dialogic interaction because the question of a child stands for a certain cognitive task, which can be solved through dialogue of the preschooler with the peer. Thus, in the collaborative thinking activity, the process of reasoning, being in the individual activities as a particular inner intelligent act, passed into the external plan and presented in the form of the dialogue.

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DIFFUSION OF INNOVATION IN MODERN SCHOOL

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Abstract: This paper presents the results of research aimed to examine how teachers are interested in the application of innovation in teaching and in their personal development. An attempt was made to determine their opinion on the application of innovation in education. Sample consisted of 162 teachers (N = 162) in primary and secondary schools. We used the technique of scaling and instrument evaluation scale that was specifically designed for this research. The results show that teachers easily and smoothly implement innovations in their educational work and the knowledge gained by applying innovation far better in terms of practical application and durability of the knowledge acquired without the use of innovation. A qualitative analysis has shown that the majority of respondents had positive views of the use of innovations in their schools.

Keywords: innovation, modern schools, information technology, teacher education.

1. Introduction

Modern information technology has changed the way of working in all areas of life. This new information technology has influenced major changes in the school system. Alexander King points out that "after the steam engine no other single invention has had such a huge impact on all areas of human activity as the phenomena of chips and integrated circuits". Educative work continues to be performed according to the formula of J. A. Komenski, which was introduced more than three centuries ago. Schools must fundamentally change the approach to work as influenced by information technology, gradually abandoning the tradition established by Komenski. It was a revolutionary step in the development of education, but over time, its possibilities are exhausted so that it is in the present circumstances it has become a factor that limits the the contemporary role of schools [8]. Teachers, students and the school itself have now found themselves in a very different information environment than before. Schools that accept this environment will be much more modern and more successful and will not look like traditional schools where the teacher and the textbook are the only available sources of knowledge. By applying information technology, schools can continually innovate their new knowledge. Innovation is the requirement that the school does not remain at the traditional level.

The term "innovation" came into use in 1930, as a term used in sociology and cultural anthropology, and is directly connected with the idea of expanding cultural phenomena. This approach is different in spatial and temporal distribution of time, which has different rates, widespread at present. The innovation in this approach is considered as the basis of changes in culture and dissemination of cultural features or subculture of their own borders. The term innovation is of Latin origin (*novus* - new, *inovatio* - novelty, change, innovate - to do something new). Innovation is considered to be improving, upgrading, modernization and development. However, there are various definitions of the concept of innovation. Everett Rogers says that "the idea that innovation is the new individual. It does not matter if the idea is objectively new or not, it is time that has elapsed since its first use or discovery." LaPiere points out that innovation is a new idea. D. McClelland says that innovation is something new or different from the previous time or special situation. V.

Djurić notes that it is an idea that has been recently created, or we recently got in touch with, and is different from the existing ones. B. Vlahović believes that every educational innovation consciously constructs and creates a change that brings new moments and positively changes the essence of the current state of the educational process [8]. Most authors agree, however, that Rogers's understanding is correct. P. Mandić said that innovation in the upbringing and educational activities is a synchronized system of pedagogical, social, organizational and economic measures (based firmly on educational and other sciences) aimed at raising the level and quality of educational work, the rational use of human resources, time and creativity of teachers and students. He gives a more extensive classification of innovation that includes the education system and work in schools. He distinguishes innovation as changes in educational objectives, the function of the school system, teaching contents and function of teachers, resources, work, organization, implementation and evaluation of teaching.

We tried to find out the perception of teachers towards the implementation of innovations in educational work.

2. Methods

The goal of this research is reflected in the effort to investigate how teachers are interested in the application of innovations in teaching and for their personal development. The study sample consisted of 162 teachers, 57 in primary and 105 in secondary schools.

The tasks of this study were to: examine whether, based on the beliefs of teachers, SPISŠ1 scale meets the criteria of reliability, examine whether the results obtained from SPISŠ1 scales meet the criteria of normality curvature distribution, i.e. parametric criteria, examine whether there is interconnection among the items of SPISŠ1 scale on the basis of which they can be reduced to a smaller number of more fundamental variables (factors) that explain this inter-connectedness; to examine whether the beliefs of male teachers are more positive beliefs than female teachers.

The method applied in this study is selected in accordance with the objectives, goals and tasks of research, and in accordance with the hypotheses. The survey will use scaling technique and instrument evaluation scale (Likert), which will be specially designed for this research. It consists of 15 items that include statements that describe the perceptions of teachers towards the implementation of school innovation. Every statement is offered as a five-point response scale from 1 to 5, where the numbers mean the following: 1-very strongly disagree, 2-Disagree, 3-Tend to agree, 4-agree, 5-agree very.

3. The organization and flow of the experimental research

The study was conducted in primary and secondary schools; primary schools “Branko Radičević” in Vranje, and “Vuk Karadžić” in Surdulica, and in Technical Secondary School and Secondary School of Economics in Vranje. There were 57 (35.2%) elementary school teachers (20 primary school and 37 middle school teachers), and 105 (64.8%) secondary school teachers (Table 1).

Table 1. The structure of the sample of teachers

Variables		*f*	%
Gender	Male	68	42
	Female	94	58
	Total	162	100
Type of school	Elementary School	57	35,2
	Secondary school	105	64,8
	Total	162	100
Work experience	Up to 10 years	41	25,3
	10-30 years	100	61,7
	Over 30 years	21	13
	Total	162	100
Profession	Primary school teacher	20	12,3
	Middle school teacher	37	22,8
	Secondary school teacher	105	64,8
	Total	162	100

SPSS17 software was used to process the data (Statistical Package of Social Sciences for Windows-and for parallel Monte Carlo analysis).

4. Results and Discussion

In the preliminary research there were 15 primary manifest variables. Since the number of participants should not be less than 100, or less than the number of initial variables multiplied by 5, it met the initial criteria. Table 2 shows the communality of prominent variables that tells us how much of the variance of each variable explained with a certain number of retained components (factors).

Table 2. Communality manifest variables

	Initial	Derived
V1	1.000	.681
V2	1.000	.550
V3	1.000	.519
V4	1.000	.319
V5	1.000	.480
V6	1.000	.079
V7	1.000	.490
V8	1.000	.561
V9	1.000	.592
V10	1.000	.682
V11	1.000	.645
V12	1.000	.344
V13	1.000	.635
V14	1.000	.477
V15	1.000	.575

Extraction method (Extraction Method): The analysis of the main factors

The scale was subjected to a principal components analysis (PCA Principal Component Analysis) to SPSS v. 17. Prior to the implementation of the PCA, the suitability of data for factor analysis was ranked. A review of the correlation matrix revealed many coefficient values of 0.3 and above. The value of the Kaiser-Meyer-Okinov indicators (Table 3) was 0.877, which exceeds the recommended value of 0.6. [2, 3] The Bartlett test of sphericity (Bartlett, 1954) also reached statistical significance. Value Bartlett test for statistical significance of the correlation matrix 2 = 980 594 with 105 degrees of freedom and sig. 1% confirms the appropriateness of statistical analysis of the data collected by factor analysis. Bartlett indicator is significant (p = 0.000), and factor analysis was justified.

Table 3. Testing assumptions of reliability data for factor analysis

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.877
Bartlett's Test of Sphericity	Approx. Chi-Square	980.594
	df	105
	Sig	.000

According to Kaiser Gutmann criteria only those factors that best explain the variability are taken into account, i.e. with a value greater than one. Principal components analysis revealed the presence of three components with characteristic values exceeding 1, explaining 38.110%, 50.862% and 58.245%. Only the first three components have characteristic value above 1 (5,716, 1,913, 1,107). As the third component has the approximate value of 1, it should not be taken into consideration. The first two components explain 50.86 percent of the variance. Table 4 shows the variance explained by individual factors.

Table 4. Principal components analysis

Component	Initial eigenvalues			Featured sum of squares of saturation			Rotated sum of squares of saturation
	Total	% variance	Cumulative series %	Total	% variance	Cumulative series %	Total
1	5.716	38.110	38,110	5,716	38,110	38,110	4,762
2	1.913	12.752	50,862	1,913	12,752	50,862	4,535
3	1.107	7.383	58,245				
4	.967	6.449	64.694				
5	.855	5.701	70.394				
6	.704	4.695	75.090				
7	.617	4.112	79.202				
8	.534	3.563	82.765				
9	.514	3.425	86.189				
10	.449	2.995	89.184				
11	.401	2.673	91.856				
12	.356	2.376	94.233				
13	.337	2.245	96.478				
14	.271	1.806	98.284				
15	.257	1.716	100.000				

Extraction method (Extraction Method): The analysis of the main factors

For further confirmation of the factor analysis and determining the number of factors a parallel analysis was performed (Table 5) and the results were compared with those obtained in SPSS (Table 6).

Table 5. The results of the parallel analysis

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Monte Carlo PCA for Parallel Analysis
Version 2.5
1/26/2013  10:49:53 AM
Number of variables:    15
Number of subjects:     162
Number of replications: 100
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Eigenvalue #	Random Eigenvalue	Standard Dev
1	1.5595	.0730
2	1.4326	.0494
3	1.3287	.0372
4	1.2433	.0421
5	1.1668	.0392
6	1.0955	.0321
7	1.0336	.0324
8	0.9692	.0314
9	0.9140	.0283
10	0.8541	.0289
11	0.8011	.0296
12	0.7436	.0305
13	0.6860	.0320
14	0.6201	.0330
15	0.5518	.0376

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Monte Carlo PCA for Parallel Analysis
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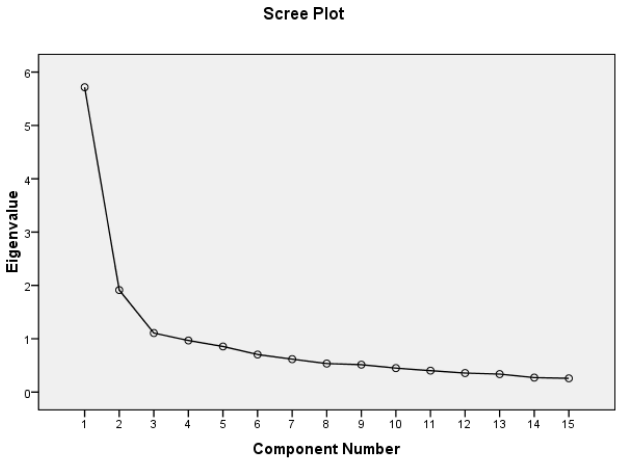
Table 6. Comparison of characteristic values obtained by PCA and threshold values obtained by the parallel analysis

Serial number of components	The actual characteristic values of PCA	Values obtained by parallel analysis	Decision
1	5,716	1.5595	Accept
2	1,913	1.4326	Accept
3	1,107	1.3287	Reject
4	0,967	1.2433	Reject

The outcome of the parallel analysis supports our conclusion to keep the two components. Here is a review of Cattell's landslide method. Diagrams show (Scree Plot) the existence of a clear break point after the third component. Based on Cattell's criteria it was decided to retain for further exploration of two components.

This is supported by the results of parallel analyzes, with only two components whose characteristic values exceed the corresponding threshold values obtained with the equally large array of random numbers (variable 15 * 162 respondents).

Fig. 1 A number of factors of Cattell's method by landslides (Scree Plot)



The attached chart clearly shows fracture at the junction of the second and third components. And the first component explains much more of the variance of the remaining components. The greatest burden lies on the first factor, which has the highest value in explaining manifest variables. Each successive factor explains a smaller proportion of the total variance.

Processing of data in a table shows that the component 1 has eight weight factors, component 2 also has eight factors, component 3 has only one factor above 0.3. It would be ideal if each component had three or more of the weight factors, so this solution is not optimal, which means that it should accept only two factors.

This two-component solution explained a total of 50.86% of the variance, with a contribution of 1 component of 38.11%, and 2 components of 12.75%. To help interpret these two components rotations were performed. Rotated solution revealed the presence of a simple structure, in which both components have a lot of big weight factor and all variables provide considerable weight of only one component.

Two-factor solution explained only 50.86 percent of the variance. After the rotation two-factor solutions we can see that the main component weight factor 1 the items 9, 11, 8, 10 and 15 The main items of Component 2 are 13, 1, 2 and 5 (Table 7).

Table 7. Primary Factors to evaluate

	Component	
	1	2
V9	.834	
V11	.792	
V8	.778	
V10	.752	
V15	.727	
V7	.648	

V12	.416	
V13		.847
V1		.832
V2		.748
V5		.732
V14		.625
V4		.496
V3	.381	.466
V6		

Extraction method: principal component analysis
Rotation Method: Oblimin with Kaiser normalization

Factor 1, which has the highest value, can be called "Innovation in teaching" because it is characterized by variables related to the implementation of innovations in teaching, use of the Internet in teaching and the use of innovation in teaching.

Factor 2 is related to the school system and the use of innovations in schools which is why we can name it "Innovation in schools". Variables that describe this factor are: use of systemic innovation in schools, the use of space and technical innovations in schools, the implementation of the evaluational and docimological innovations.

By using two-factor univariate ANOVA on data obtained SPISŠ1 scale we tried to determine the interconnection of independent variables (gender and occupation) in relation to the beliefs of teachers in the interest of application innovation in teaching (Table 8).

Table 8. Tests influences between variables

Gender	Profession	M	SD	N	^{a}F	^{a}p	^{b}F	^{b}p	^{c}F	^{c}p
1 Male	Primary school teacher	4.00	.	1						
	Middle school teacher	4.62	.719	16						
	Secondary school teacher	4.27	.802	51						
	Total	4.35	.787	68						
2 Female	Primary school teacher	4.11	.994	19						
	Middle school teacher	4.19	.814	21						
	Secondary school teacher	4.28	.763	54						
	Total	4.22	.819	94						
Total	Primary school teacher	4.10	.968	20						
	Middle school teacher	4.38	.794	37						
	Secondary school teacher	4.28	.778	105						
	Total	4.28	.806	162	,136	,713	,546	,580	1,024	,362

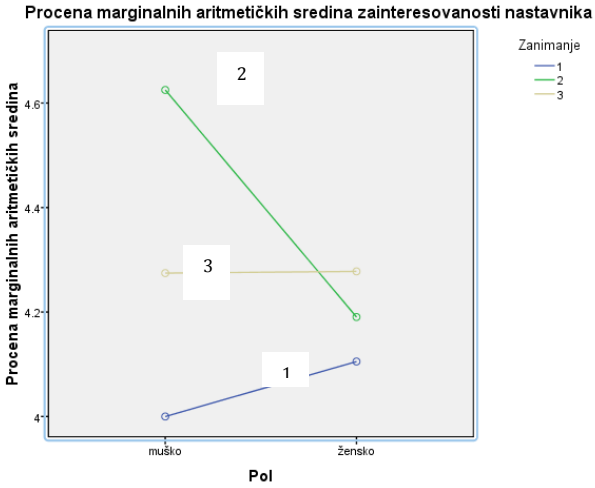
From Table 8 we can see that the beliefs of male teachers (M = 4.35) were not significantly different from those of female teachers (M = 4.22), which confirms the F ratio (f = 0.136) was not statistically significant. We conclude that the result is not consistent with the assumption that the responses of male subjects are more positive than the responses of female respondents. Also, the

value of F ratio indicates that there is no statistically significant difference between the average degree of deviation from the standard of results between the male members (SD = 0.78) and female members (SD = 0,81).

As for the interaction of gender and occupations, it can be said that there is a mutual relationship between these independent variables in relation to the factor of interest in the application of innovation (bf = .54). From this we can conclude that there is no statistically significant difference in the beliefs of male and female teachers.

The beliefs of male middle school teachers (M = 4.62) were more positive than those from female teachers (M = 4,19). Overall, middle teachers' beliefs (M = 4.38) were more positive than those of secondary school teachers (M = 4.28) and primary school teachers (M = 4,10). That's all we can see and the inclination of the line on the graph where the line 2 steepest, followed by line 3 and at the end of line 1

Fig. 2 Means - The interest of teachers in the use of innovations in teaching



Note: 1-primary school teachers, 2-middle school teachers, 3-secondary school teachers

Given the overall high scale value of M = 4.28 we can say that middle school teachers are interested in the application of innovation in education. Despite these results, it is desirable to conduct a new research on the beliefs of teachers in the implementation of innovations in education and look for the dominant factors that increase teachers' motivation for innovation in education.

5. Conclusion

This paper was written with the aim to investigate and determine what the attitudes toward implementation of innovation in education are. In the paper, we set up a hypothesis on which we have conducted research and have come to the following conclusions.

The first hypothesis is related to the fact that the scale meets the criteria of reliability. As the value of the Cronbach alpha coefficient equals 0.875, the scale meets the criteria of reliability, which we confirmed the first hypothesis.

The second hypothesis is related to the fact that the set items meet the parametric criteria. Using the Kolmorgor-Smirn test and Shapiro-Vilkov test we found that the distribution of results SPISŠ1 scale is at the level of significance of p = 0.001 and for all 15 claims which have confirmed the second hypothesis. This means that further analysis of the results we can use parametric tests.

Among the items of SPISŠ1 scale interconnection exists on the basis of

which they can be reduced to a small number of fundamental variables (factors) that explain the interconnection. Factor analyses of the 15 items of the scale are factorized and get two fundamental variables: innovations in teaching and school innovation.

The results are consistent with the assumption that the responses of male subjects are more positive than the responses from female respondents. From this we can conclude that there is no statistically significant difference in the beliefs of male and female teachers.

The overall grade of middle school teachers' beliefs (M = 4.38) was more positive than that of high school teachers (M = 4.28) and primary school teachers (M = 4,10).

Modern schools have extensive experience in teaching, which must be carried out in certain educational activities. Very often it remains unused because most teachers do not see the need for its study and application. In practice, teachers often do not think about the need and feasibility analysis of their own teaching experience. The innovative nature of the teacher involves the creation, development and use of pedagogical innovation and the creation of conditions for their successful development and implementation. The introduction of new items requires constant search for new forms of organization, ICT education. The innovative nature of a teacher includes the introduction of practical results of teaching activities in psychological and educational research.

The introduction of optimality in the application and dissemination of innovations in modern school means efforts and resources for teachers to achieve results. With the help of innovations, all of which are present due to the development of information and communication technologies, different teachers can achieve equally good results in different areas and with different intensity of their own work. Analysis of the literature and the results obtained by empirical studies suggests a lack of intensity of use of innovation in education. The reasons for this are that the innovation and application of new ICTs does not bring the expertise needed to use innovative means and that the application of innovation is not preceded by organizational or technical preparation in schools and individuals. The hesitation to introduce innovations in school is mostly the result of psychological aversion of teachers (not all) due to a lack of technical expertise in implementation. This suggests that teachers need to prepare for the implementation of innovations in education in order to get the most out of them and therefore shift from a traditional to a modern school.

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FAMILY INFLUENCE ON FORMATION OF CHILDREN'S MANIPULATIVE ATTITUDES

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Abstract. The article raises the issue of children's manipulation, and examines the conditions contributing to the formation of the manipulative attitudes. As such are analyzed: importance of these attitudes for the child, existence of manipulative attitudes in parents, family microclimate and position to the manipulations in society.

According to the results of an empirical study, the characteristics of the family, provoking the development of manipulative behavior in children, are described. The members of this family hardly cooperate with each other and others, are focused on self-interests, and try to satisfy them without much effort, and by using the people around them. It is accompanied by the insincerity and lack of attention to the child, and most of all to his needs, feelings and emotional stress.

Keywords: manipulations, manipulative attitudes, microclimate in the family, formation of disposition to manipulation

1. Introduction

Now, no one doubts that the behavior of parents and their parenting style largely predetermine the development of personality traits and behavior patterns in their children. In part, this is a deliberate attempt of the children to behave in the same way as the others, and it is partly an unconscious imitation, which is one of the aspects of identification with the others.

However, in the literature, as a rule, is discussed the influence of democratic, authoritarian or permissive parenting styles on the formation of certain traits of the child, and the impact of the manipulative influences of parents is undeservedly overlooked by the psychologists.

First of all, we shall note that the purpose of manipulation - while hiding one's true intentions, to induce another person to commit certain actions, change the values, ideas, opinions and the like, at the same time keeping the illusion of independence, autonomy of decisions or actions. Through a variety of tricks and techniques one performs various actions imperceptibly to a person, prompting him to do what he does not want, to turn away from what he aspires, but also create a confidence in him that he is acting on his own will [1, 2, 4, 6 and others].

At first glance it seems that the manipulation of the children by the adults is fully justified by the good intentions (to keep them out of trouble, etc.). But one must not forget that the manipulation in the first place is the use of another person in order to obtain one's own benefit, and the psychological meaning of the manipulation is to control the behavior of people, to manage them, to get power over them or benefits by limiting their freedom. In general, the manipulation of children grows out of a false understanding of the responsibility that is perceived as a constant intrusive control and deprivation of the child's right for independence.

Manipulations can be used circumstantially and unconsciously as well as consciously, purposefully, i.e. becoming a common way to interact with the children. And here is completely unclear whether the manipulative attitudes of the parents influence the formation of such in their children? Social attitudes of the parents may differ but what will happen to the formation of the social attitudes in a child?

All this formed the basis for the empirical study, the *purpose* of which was to determine the effect of the manipulative attitudes of parents on the formation of such in their children.

2. Respondents, study methods and results

Respondents. The study involved 15 families with children ranging from 8 to 10 years old. In total, the study involved 30 adults and 30 children.

Study methods: Questionnaire "Machiavellianism" - a technique created by American scientists Christie and Geis to determine Machiavellian (manipulative) attitudes of personality. We used a version of this technique for adults (Mach-4) and a children's test for Machiavellianism (Kiddie Mach Test).

Study results. The data allowed to divide respondents into three groups: those with a high level of Machiavellianism, middle and low levels of Machiavellianism. Most of the spouses had a middle level of Machiavellian attitudes intensity, but we were interested, first of all, in those respondents with significantly high Machiavellian tendencies. Such were 29% males and 31% females. Moreover, almost 40% of the children also had high level of Machiavellian tendencies, suggesting the influence of the manipulative attitudes of the parents on the formation of such in children. Further analysis confirmed that. Not only in the cases where the manipulative attitudes of the spouses matched, but if the father's level of Machiavellianism was high, the child also had a strong tendency. The high level of Machiavellianism of the mother also influenced the level of the child's Machiavellianism. Thus, the manipulative tendencies of fathers and mothers can equally contribute to the development of such tendencies in their children. In general, in the group of parents with high scores in Machiavellianism scale a positive correlation with the scores of Machiavellianism in children is established, the higher Machiavellianism is in the parents, the higher it is in the children ($p \leq 0.05$).

Thus, the existence of manipulative attitudes in parents provokes the formation of such in their children. Perhaps this is a simple copy of their behavior, as well as the formation of the attitude to manipulations as behavior that benefits the child.

However, it can be assumed that the microclimate in the family will also contribute to the formation of the manipulative attitudes in children. Our previous studies have shown that the existence of the manipulative attitudes lowers the couple's marital satisfaction [4], and this suggests that the socio-psychological climate in the family is unsatisfactory. Therefore, the child will grow up in poor conditions, or in the terminology of some authors, in a dysfunctional family. However, the question remains as to what kind of characteristics of such dysfunctional family will provoke the formation of disposition to manipulation in children. In this regard, we have continued the study.

The *purpose* of it was to determine the characteristics of the family (referred to by the analogy with the literature references as dysfunctional), provoking the development of manipulative tendencies in children.

Respondents. The study involved 56 boys and girls, high school students aged 15 to 17 and 5 school teachers.

Study methods. To determine the characteristics of family problems in the families of students, the method of expert judges was used. The experts were 5 school employees: head of the teaching department, head of the teaching department for educational work, two teachers working with these children, school psychologist.

From the literature references [3, 7, 8 and others], 15 characteristics of a dysfunctional family have been identified. On their basis a profile has been compiled, which was presented to experts for evaluation of the intensity of the characteristics of families in which children are brought up. To diagnose the level of intensity of the manipulation

disposition of the high school students have also been used the "Mach - 4" technique.

Study results. On the basis of expert evaluations, two groups of students were identified: the first group consisted of young men and women who live in dysfunctional families (25 people) and the second group was formed by the young men and women living in problem-free families (31 people).

The results of the study of Machiavellian tendencies of teenagers from problem-free and dysfunctional families are shown in Fig. 1.

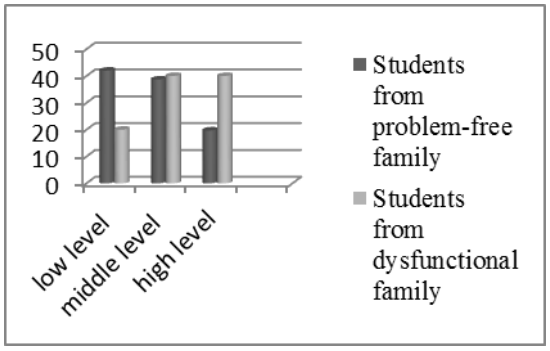

Fig. 1. Intensity of Machiavellian tendencies in students from problem-free and dysfunctional families (in %)

As can be seen from Figure 1, among the teenagers from dysfunctional families there are two times more those with the high level of Machiavellianism intensity, and more than two times less persons with the low level of intensity of manipulative attitudes. The significant differences between them (χ^2 = 4,125 with $p \leq 0{,}05$) suggests that the students from the problem-free families are less predisposed to the manipulative behavior.

Of the variety offered by the characteristics of a dysfunctional family, the experts selected the following parameters: orientation of the family on their own selfish interests and lack of disposition to the cooperation, low level of group cohesion, attraction to momentary pleasures that do not require any effort, insincerity, desire to use others for one's own purposes, lack of attention to the child and lack of concern about him, ignoring the inner world and experiences of the child (Fig. 2).

The use of U - Mann-Whitney test showed the presence of significant differences between the two groups of students according to this parameters (U_{Emp} = 0 with $p \leq 0.05$).

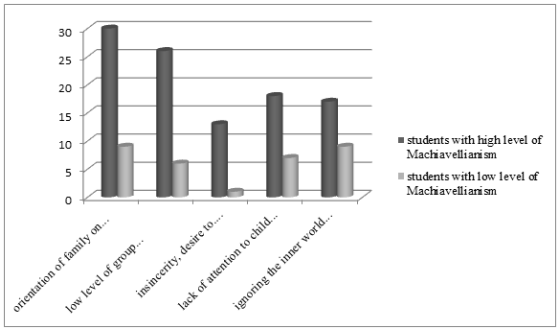

Fig. 2. Intensity of dysfunctional family parameters in a group of students with high and low levels of Machiavellianism

It is easy to see that each of the selected characteristics of a dysfunctional family can contribute to the formation of a predisposition in children to manipulative behavior, but it turned out that the characteristics are closely linked. We have found a positive correlation between the orientation of the family on their own selfish interests and the lack of attention to the child and the lack of concern about him ($p \leq 0.01$); between the priority of reaching success with minimum labor and insincerity, the desire to use others for one's own purposes, and the suppression of feelings and needs of the child ($p \leq 0.05$). This allows us to describe the family, provoking the development of the manipulative attitudes in children as follows. Family members hardly cooperate with each other and others, are focused on self-interest, and try to satisfy them without much effort, and by using the people around them. It is accompanied by the insincerity and lack of attention to the child, and most of all to his needs, feelings and emotional stress.

3. Discussion of results

So, as fairly pointed out by E. Shostrom, people are not born manipulators, they become such. They are created out of small children by leading them into the manipulative world of modern man. The first lesson they get from their parents, who, in turn, represent a finished product of the modern manipulative society [6]. Up to a certain time, the parents quite successfully manage to manipulate their children. It even brings visible results, but many years later, when the children start to manipulate their parents, the last begin to reap the fruits of their upbringing.

In addition to the targeted education of parents, the microclimate in the family affects the child. Watching how parents manipulate each other, the child also learns the manipulative behavior attitudes.

However, in order to make this method of interaction to be reinforced, and then to appear in the child's relationships with other people, this is not enough. It is necessary for the child to realize his own gain from the manipulations and strive to them for the benefit.

Manipulation, despite a number of advantages (quick results with minimum waste of time and labor, etc.), is non-constructive communication, as evidenced by the obtained data. Then how can one change the manipulative attitudes?

As known, attitude change occurs when there is a mismatch in a cognitive structure. For example, the customary manipulative attitude to use others for one's own purposes confronts a positive attitude to the person in relation to whom the manipulation is supposed to be carried out. Since the impetus for the attitude change is the need of the individual for restoring cognitive conformity [5], it can be assumed that the more loving people in a child's life, the more likely the refusal of the child from the manipulative behavior.

Thus, the change of the manipulative attitudes can be analyzed in terms of changes in the active position of the child, caused by the development of his personality. But it can also be analyzed from the point of view of the content of the objective social changes affecting the given level of dispositions, such as change of microclimate in the family. Finally, there is one more important factor - social situation, if society itself will not be encouraging the manipulative behavior of its citizens.

So, whether the children become manipulators or not, depends on many factors: on the significance of these attitudes for the child, the existence of manipulative attitudes in the parents, microclimate in the family and society in general. In this case, one can agree with a number of scientists that if there is the social resistance to this kind of behavior,

the manipulative attitudes of both parents and their children will become unprofitable, and thus, the manipulations will lose their attractiveness as failing to meet the main condition - obtaining benefits for oneself at the expense of the other.

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FLEXIBLE RATIONALITY AS A COGNITIVE MODEL

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Abstract. The paper considers a flexible rationality as a new category of postnonclassical science that reveals the correlation of rational and irrational in cognition. As leading in the construction of a methodology for the cognitive modeling of the flexible rationality author selected cognitive-discursive and experiential approaches. "Cognitive matrix" of the cognizing subject is represented by the linguistic means (cognition, concept, category) - the linguistic form of the flexible rationality. Fulfilling the role of the cognitive "tools", the linguistic structures demonstrate the integrity of the perception and meaning system of the cognizing subject as onticaly holistic bearer of the flexible rationality in the unity of the anthropological and socio-cultural specifics.

Keywords*:* scientific cognition, new knowledge, rationality, cognizing subject, rational and irrational, flexible rationality.

1. Introduction

Rationality - one of the inexhaustible problems of the mankind that has discovered its ability to think. Rationality provides a smooth process of existence cognition. The product of the scientific-rational creation is ideas and knowledge.

The issue of how the new knowledge emerges, how the transition from the senses to the concepts and from the concepts to the senses originates, is one of the major ones in the cognitive science. Scientists give different interpretations of the techniques, methods of the new knowledge acquisition. They are interested both in the *rational* characteristics of the scientific cognition and the *irrational* sphere of the research process.

Speaking about the irrational in cognition, we come in contact with its bearer - a subject, without who the cognition process is impossible, who directly implements the cognition process in its rational activity. The variety of the activity forms generates a *variety* of forms of the rational knowledge and rational action. It shows the relativity, inconsistency and historicity of the rational, which is overcome by the dynamic development of the subject.

Rationality is not a frozen, once and for all formed phenomenon. It evolves, changes, passes through a series of steps, stages that affect the formation of its historical types, forms that are "eager" to be appropriate to its time, otherwise they will not be needed in the society.

Searches and "discoveries" of the new forms of rationality in the modern synthesis of the scientific knowledge show the recognition of the possibility of the scientific rationality adjustment, which is associated with the expansion of understanding about the cognizing subject as its bearer, having the rational and irrational forms of knowledge in their unity. The issue of rationality is relevant as the issue of the mental nature of the cognizing subject. Cognitive modeling of rationality reveals the mentality models of the active and cognizing subject.

2. The evolution of epistemological paradigm

In the cognition of the subject as a complex cognitive system, the classical rationality revealed its limitations. This fact has been recognized by the irrationalism, intuitionism etc., but received its justification only at the stage of non-classical and postnonclassical science. The modern epistemological paradigm takes into account the holistic

nature of the cognizing subject in its relation with the object. The subject is not acting in a virtual space as an abstract entity. This is - first of all "living" ontic subject, having all the specific ontological, anthropological, psychological, epistemo-logical, and other characteristics. Therefore it is necessary to study the relationship between the rational and irrational in the scientific cognition, to explain the anthropological and pre-logical characteristics of the cognizing subject, emotional expressions, intuition that accompany the research activities as its internal latent background. The subject, using intuitively the irrational forms as a cognitive tool, reveals the diversity of opportunities of obtaining new knowledge both about the object, and the cognizing subject, its cognitive abilities and capacities.

Forms of expression of the cognitive content match various *linguistic structures*. They are always adequate to the thinking culture of the cognizing subject, its historical era. Currently, the researches to improve the linguistic means of expressing of the new forms of rationality are intensively developed.

In modern postnonclassical science is observed the formation of a methodology for the new knowledge acquisition within an epistemological paradigm that integrates not only the rational, formally logic, but also the cognitive, pragmatic, informative, linguistic, communicative aspects of the acquisition and expression by the linguistic means of the new knowledge.

As leaders in the construction of the cognitive modeling methodology we can call the cognitive-discursive and experiential approaches.

3. The methodology of cognitive modeling flexible rationality

Cognitive-discursive approach considers the cognition in the aspect of the unity of its *content* (consciousness) and *form* (language). The cognizing subject is presented as functional, actively perceiving and producing information, guided in its mental activity by the particular methodology, which includes the diagrams, programs, plans and strategies. Cognitive science in this aspect is considered as the science about the general principles governing the mental processes in the human brain. But knowledge is expressed in language, speech as linguistic forms of the cognitive content. Therefore it is important to consider the dynamics of the language (changes occurring in it on the basis of the word-formation modeling of the subject as linguistic identity), and to analyze the relationship between the language representation and the conceptual structure of the words formed by these models. Cognitive models of the speech processes reveal the common outline of the extremely complex in its nature mechanism that implements the speech-thought activity. Their orientation is to consider and coordinate the main factors involved in the process of constructing the integral speech-thought process in communication. Based on the *experiential* approach is the study of the subject language area in the direction from the linguistic world picture to the conceptual world picture. It takes into account the language interaction experience of the subject with the outside world on a level of the theoretical (categories) and ordinary (cognitions) knowledge. [1]

4. Flexible rationality as a Category

We have chosen the research (cognitive) methodological strategy that involves the consideration of a new form of rationality - **flexible rationality** as a category, revealing the correlation of the rational and irrational in cognition.

A little about the premises of the introduction of this concept. The term

"*flexible*" rationality used V.N. Porus [5], evaluating and interpreting the developments of S. Toulmin in the philosophy of science and rationality issue solution. English post positivism philosopher S. Toulmin introduced rationality as an "attribute of human actions and initiatives" [8, p. 141]. The leading characteristic of such rationality S. Toulmin calls the human understanding: "Man cognizes, but he also realizes that he cognizes" [8, p. 23]. Understanding in science, according to S. Toulmin, is given by the correspondence to "the matrixes" (standards) of understanding, accepted in the scientific community at a given historical period, and problem situations and cases, as the basis of "improving the understanding." Thus, such a rationality ("*understanding*" - S.M.) allows the inclusion of the subject in the cognizing process as a moment of adjustment of rationality as a process. V.N. Porus, developing the issue of *paradoxical* rationality, "grabbed" the duality-paradox of rationality as a process that requires for the explanation of rationality an involvement of irrational. [6]

In our interpretation this paradox is generated by the dual functioning of the cognizing subject as an epistemological-ontic subject - the bearer of rationality (as an *epistemological* subject), but also irrational (feelings, emotions, desires, intuition, faith, doubt, will, etc.) - as an *ontic* subject. And it is this not considered by the "rigid" rationality binarity, which is expressed in the course of the scientific cognition at the intermediate, but very important in terms of synergy and heuristic stage of the scientific research, "wandering" through the maze of consciousness and discovered by the rationality, is needed to identify.

We consider a *flexible rationality* as a logical cognition, taking into account the pre-logical and anthropological assumptions and characteristics of the cognizing subject. [4]

Applying the concept of flexibility to rationality, we come to a certain understanding of the nature of rationality, first of all - scientific. The flexibility of scientific rationality - an issue not yet studied in detail and unresolved by the philosophers. But the starting point of the solution, "thread", which can lead to success, can serve as a reference to the roots of rationality, its ontology - the ordinary.

Pre-logical and anthropological characteristics characterize the cognizing subject from the standpoint of its ontology - the ordinary. It is the characteristics of the subject ontology that give the rationality flexibility. What are these characteristics? In psychological literature [2. 433-456, and 3, p. 118-122] *flexibility of thinking* is considered as the quality of the productive thinking, manifested in the ability of the subject to rethink the situation, to improve the best available methods of problem solving that cease to be effective, in the ability of the subject to abandon the stereotypical mode of action and identify new, unusual qualities and relationships of the objects and other. As *aspects of the rationality flexibility* in its ontology can be considered sensitivity, vigilance, insight, depth, historicism of thinking, its dialectic, wisdom. The knowledge and high sensitivity, the resonant tune to the object underlies all of these roles of the thinking flexibility. In addition, the flexible rationality covers a wide layer of forms of the irrational cognition (emotions, feelings, desires, intuition, imagination, doubt, etc.), which also show its flexibility to adequately disclose the new features of the cognizing subject, interested in realizing its cognitive potential and abilities. *Antipodes of the flexible rationality*: dogmatism, rigor, thinking inertia, rigidity (perceptual, affective, motivational), egocentrism, self-appreciation, narrow interests, stubbornness, ignoring other alternatives, etc.

Thus, the flexible rationality - a free deployment of the mental entity of the actively cognizing subject, its self-consciousness in the course of activity.

Flexible rationality is becoming a new form and category of the scientific rationality in terms of the postnonclassical science. Flexible rationality has two "incarnations" - the flexibility of rationality *as the knowledge* and the flexibility of rationality *as the activity*, including the flexibility of the methodology of this activity.

5. The ratio of flexible and rigid rationality

Let us note certain milestones in advancing the development of the rationality issue. To do this, we have introduced the concept of "*rigid rationality*" as an antipode to "flexible" rationality. "Rigid rationality" is associated by the author with a relatively stable set of rules, regulations, standards, models of the thinking and objective activity of a particular community, with a formal logic, classical type of rationality, metaphysical way of thinking, principle of unambiguous determination, linearity, etc. [4] The main difference between these forms of "rigid" and "flexible" rationality - in ways of cognition as a cognitive activity, understanding of the nature of the cognizing subject and the issue of the correlation between subject and object.

Different historical stages in the development of the science correspond to certain historical types of rationality marked by V.S. Stepin [7] - classical, non-classical and postnonclassical. The criterion here is the correlation between subject and object in the cognitive process.

Let us note the correlation of "rigid" and "flexible" rationality in historical and typological dynamics of the science, rationality, status of the subject in the subject-object relationship.

In the **classic** type of rationality, the subject-object relationships are defined by the *rigid* boundaries of rationality based mainly on logic, algorithmic methods of deduction, induction, observation, experiment within the framework of the universal causality and determinism. The subject is averaged, is not represented by its individual cognitive characteristics that are generally not taken into account in the cognitive activity, cut off from the object and self-contained as an *epistemological* subject. In the **non-classical** type of rationality is given a new interpretation of the subject-object relationship *with the over-balance of the subject initiative*. It actively cognizes the object by using the updated methodology, new methods of the scientific cognition (mathematical logic, mathematical hypothesis, statistics, probability, etc.) and principles (of relativity, complementarity, correspond-dence, etc.). The "subject-object" system is dynamic, as the subject and object change and are determined, *not rigidly, but more flexibly* under the influence of the action of chance, opportunity, etc. **Postnonclassical** rationality determines the *leading flexible creative and constructive role of the subject* as a "system genesis core" in the formation of the world picture through the use of knowledge as a cognition tool, as a prospect of creation of existence. Cognitive *innovative* methodology includes a synergistic approach to understanding the world, interprets the cognizing subject, the process of the world cognition and the subject as a self-developing integrity, but unstable, unsteady, unbalanced, chaotic, uncertain. The subject is given the right to choose the best ways of favorable and successful interaction with the world and thus surviving in it, the condition of which is the *target value* embodiment of rationality. Thus, the subject as a bearer of flexible rationality is saturated not only with anthropological, but socio-cultural specifics, which are close to reality, and becomes *onticaly holistic*.

On the basis of these considerations, flexible rationality is characterized by us as

a manifestation of the human intellect in the field of scientific cognition on the basis of not only and not so much respect for the laws and rules of logic as with the goal rationality and feasibility of the cognitive process, various ways and methods (inductive, deductive, etc.) of knowledge acquisition as well as evolution of understanding of the knowledge by the subject. Such a conception about rationality involves a deeper understanding of the possibilities of cognition than in the case of the simple compliance with the laws and rules of logic.

Flexible rationality combines *dialectical* thinking that has reached a stage of the particular universality in the theoretical consciousness and *synergistic* thinking, demonstrating the non-linearity, stochastic process of cognition. At the same time flexible rationality appears as the highest form in cognition strategy.

Basic types and forms of scientific rationality characterize the magnitude of the cognitive activity of the subject to streamline the knowledge of the world, building a cognitive model of methodology of the scientific research and organization of the related activity, adequate, constructively effective and epistemologically relevant.

6. Linguo-cognitive forms of flexible of rationality

With the birth of the cognitive science, the flexible form of rationality is fixed - cognition, concept and category (as a grammatical form). Taken together, this "*cognitive matrix*" of the cognizing subject characterizes its inner world, outlook, attitude, "world perception", world view, identifies their role as cognitive "tools", demonstrating the integrity of the perception, system of meanings. The various language structures correspond to the forms of expression of the cognitive content. They are always adequate to culture of thinking of the cognizing subject, his historical era. Currently, the researches to improve the linguistic means of expressing new forms of rationality are intensively developed.

In our view, the language of flexible rationality is formed by the new modern linguo-cognitive (prototypical category-zation, metaphor in scientific discourse) as well as non-standard logical and mathematical methods ("irrational" mathematics, intuitionism, Zadeh's fuzzy sets, multi-valued logic, etc.), the development and improvement of which will allow in the future to develop a coherent and complete concept.

7. Conclusion

Thus, cognitive science revises its methodology, is looking for models of flexible rationality.

In modern Russian science *evolutionary approach* [9] showed the constructive possibilities of the cognitive evolutionary epistemology in the development of a concept of flexible rationality.

The issue of rationality and creation of its cognitive models is not solved; it is only at the stage of final awareness of the need for further more in-depth theoretical development. The work of finding, specification and improvement of the mechanism, forms, methodology and language of flexible rationality lies ahead.

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PARENTS AND FRIENDS AS FACTORS OF CHILD`S BEHAVIOR AT SCHOOL: A COMPARISON OF MULTIPLE CORRELATIONS

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Abstract. Why are some children lonely, aggressive or they behaving prosocially at school? This study tends to answer the research question: how are family and peer relations associated with the social behavior of the pupils in mid childhood and early adolescence (3rd grade and 7th grade pupils), respectively. The hypotheses refer to the differences in the connections of the family and peer relations with the student's social behavior at school. The data gathered from 194 examinees were elaborated in the research, as follows: 3rd grade pupils (85) and 7th grade pupils (109).

The data from third grade pupils shows that multiple correlation between family variables in regards to loneliness is more significant (R=0.639, p<0. 01) than multiple correlation of peer variables (R=0.352, p>0. 05) which is not significant. For aggressive behavior both correlations: family (R=0.494, p<0. 05) and peer variable (R=0.489, p<0.05) are significant. For prosocially behavior both family (R=0.434, p<0.05) and peer correlations (R=0.423, p<0.05) are almost equally significant. Shyness is not significantly associated neither with family nor with peer variables. Satisfaction from school is significantly associated with peer variables (R=0.440, p<0. 05) and with family variables (R=0.482, p<0.05) too.

For the seventh grade students loneliness is significantly more influenced by family variables (R=0.617, p<0.01) than by peer variables (R=0.422, p<0.01). Aggressive behavior is more significantly related to family variables (R=0.577, p<0, 01) than peer variables. From that data the conclusion is that family variables in more cases are connected with child's social behavior at school than peer variables, in middle childhood but and in early adolescence, too.

Key words: family relations, peer relations, behaviour of the child at school

1. Introduction

Widespread belief is that child's social skills in the peer relations are determined by the quality and safety of early attachment to the mother [4]. Psychoanalytic assumptions of the interaction child-mother, shows the importance of the childhood, especially the first years of the child's life. Nesha and Lamb (1989) suggest four models that can explain the relationships mother-child and child-peer. The first explanation says that child's sociability develops in contact with the mother, as a precursor to the child's sociability in peer relationships (theory of attachment). In other words, the form of social relationships with the mother is the basis of the later social relationships of the child with the peers. Secondly, the two-way model includes that the child's interaction with one person further converts into a relations with other social partners. Thirdly, the explanation of the correlation between the two forms of interaction (child-mother and child-peers) results from the assumptions of individual differences in the sociability of the child, differences of the temperament (genetic model). These differences are inborn and they are constant. Children who show greater sociability usually show sociability in the interaction with both their mothers and the peers, unlike the children who show less sociability in all social relationships. The fourth model of the interaction child-mother and peers refers to quite different mechanisms of interaction (a model of social net). In fact, according to this model, social skills that are in the basis of the interaction of the child are different in regards of different social surrounding and the child's need that he/she wants to satisfy in that interaction.

2. Materials and methods

The research question is: Whether family relations are more important factors than relations with peers at school for the social behavior of the students, in a particular period of their life, in childhood and early adolescence. The assumption is that there is a difference in the level of influence of family and peer relations on the student's social behavior at school, according to their age. Our assumption is that family is a more important factor for the social behavior of the 3rd grade pupils, but in adolescence, with the 7th grade students, peers take supremacy of the influence.

The family relations are shown through the following dimensions: satisfaction with the family interaction, acceptance by the mother and by the father, rejection by the mother, and by the father, emotionality from the mother and from the father, control by the mother and by the father. The peers relations are described through the quality of the relations with the best friend, the satisfaction with the best friend, the relations of three best friends with the pupil and vice versa, the acceptance and rejection by the peers. Social behaviors of students (dependent variables) are: loneliness, aggressiveness, prosocially behavior, shyness, perception of social support from the peers and satisfaction from school

Family interaction is measured with: Scale of the quality of family interaction [9] which consists of three sub-scales: the general mood within the family, the interaction with the mother and the father (dimensions rejection and acceptance); Scale of perception of the family relations [5] which measures the styles of the parent's behavior: emotionality and control. Instruments of peer relations are: Friendship quality questionnaire [6], satisfaction with the best friend questionnaire [6], Questionnaire assessing the attitude of three best friends towards the pupil and vice versa [7], socio-metric procedure. Instruments for social behavior at school are: School loneliness questionnaire [1], Scale for aggressive behavior and Scale for prosocially behavior [12], Scale for shyness [2], Scale for peers social support [10] and Scale for satisfaction from school [3].

194 students (examinees) were included in the research, 3rd grade pupils (85) at the age of 9 and 7th grade students (109) at the age of 13. The research was conducted in May 2007 in one elementary school in Skopje (Macedonia).

3. Result

The results, in regards to hypotheses, show differences in the multiple correlations between family and peer relations and social behavior of the child at school.

It should be emphasized that multiple correlations which are not statistically correlated with variables of child's behavior, are not included in procedure of correlation differences (they are marked as F=/).

Results from the Table 1. Show that loneliness is significantly associated only with the family variables but not with the peer variables. Despite the fact that family and peer variables are significantly associated with aggressive behavior, social behavior, perception of social support and satisfaction of the child from school, there are no differences between those associations. It means that family and peers relations are on the same level associated with child's aggressiveness, social behavior, perception of the social support and satisfaction from the school. There is no significant association between shyness and family or peer's relations (and we didn't measure their differences). These results show that family variables, when compared to the peer's, are to a high

degree associated with the loneliness of the child at school.

Table 1. Differences of multiple correlations (F) between peer and family relationships in forms of social behavior among 3rd grade students (N=85)

	Forms of social behavior of the child at school					
	loneliness	agressive behaviour	prosocial behaviour	shyness	perception of social support	satisfaction of the school
peers relations (R)	.352	.494**	.434*	.384	.558**	.440*
family relations (R)	.639**	.489**	.423*	.305	.605**	.482**
F	/	.178	.532	/	1.224	.717
p	/	p > .05	p > .05	/	p > .05	p > .05

*p< .05 **p< .01

The data pertaining to differences in connection of peer and family variables with patterns of social behavior of students from 7th grade are shown in Table 2.

Table 2. Differences of multiple correlations (F) between peer and family relations in forms of social behavior among students of 7th grade (N=109)

	Forms of social behavior of the child at school					
	loneliness	agressive behaviour	prosocial behaviour	shyness	perception of social support	satisfaction of the school
peers relations (R)	.422**	.396*	.509**	.351	.654**	.320
family relations (R)	.617**	.577**	.396*	.329	.464**	.441**
F	8,317	9,147	4,981	/	19,308	/
p	p< .01	p< .01	p< .01	/	p< .01	/

*p< .05 **p< .01

From these data shown on the Table 2. (Differences of multiple correlations R) we can see that lonely behavior and aggressive behavior are associated in higher degree to family relations, while prosocial behavior and perception of social support are higher associated with peer relations. Shyness is correlated neither with family nor with peer variables, and satisfaction with school is associated only with family variables.

Table 3. Differences of multiple correlations (F) between peer and family relations in forms social behavior among students from entire sample (N=194)

	Forms of social behavior of the child at school					
	loneliness	agressive behaviour	prosocial behaviour	shyness	perception of social support	satisfacti on of the school
peers relations (R)	.386**	.438**	.462**	.239	.607**	.351**
family relations (R)	.584**	.575**	.429**	.229	.448**	.590**
F	14,130	8,497	1,401	/	16,735	21,986
p	p<.01	p<.01	p>.05	/	p<.01	p<.01

*p< .05 **p< .01

The results concerning differences in the multiple correlations of peers and family relations with the social behavior of students from the entire sample are shown in Table 3. The loneliness is significantly more associated with family variables than with peers`s. It is similar with the variable aggressive behavior and satisfaction with school. There is no difference in the degree of connection between family and peer variables. The perception of social support is more associated with peer variables. So, family relationships are more important for loneliness, aggressive behavior and satisfaction of the child from school, rather than peer relations, while peer relations are more important for the perception of social support from peers.

So, for the entire sample of students, family relationships are more important for loneliness, the aggressive behavior and the satisfaction of the child from school, than the peer relations, while peer relations are more important for the perception of the social support from peers.

4. Conclusion and discussion

According to this data, family relations are the only factor of influence for lonely behavior of the third grade pupil, while peer relations are not significantly connected. So, it speaks in favor of the importance of family relations, particularly interaction of the child with the mother and the father, like acceptance and emotionality, for the sociability and happiness of the child at school.

Failure to satisfy the need for belonging and love, primarily in the family, reflects on the social dissatisfaction of the child at school and the sense of loneliness. The feeling of loneliness is associated with the inability to satisfy the need for intimacy, emotional support, companionship and acceptance by the friends. In the research of Peplau and Perlman [8] loneliness has a cognitive dimension and is a result of dissatisfaction with the social relationships, or the perception of the existence of difference between the qualities of the desired and achieved social relationships. So, according to this theory, loneliness is a cognitive experience which is a result of seeing the family relations as inadequate. A lonely child does not have the skills for making friendships, and thee feeling of loneliness becomes established. Shyness is affected neither by family nor by peer variables. There are theories that explain the shyness with hereditary factor. For aggressive behavior, prosocially behavior, perception of social support and satisfaction from school, family and peer relations are equally important factors of influence, yet the parents and the peers are equally important models of child social behavior at school.

Although the assumption is that peers are a more significant factor for the social behavior of seventh grade students, our results show that family is still a stronger factor of influence for loneliness, aggressive behavior and satisfaction from the school, while peers are a factor of modification of the sociability and perception of social support of the young adolescents.

Based on the results of the entire sample of students, family relations in comparison to peer relations contribute to a greater extent to the understanding of loneliness, aggressive behavior and satisfaction of the child from school, while peer relationships are more important for the perception of social support from peers.

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EFFECTIVENESS AND THE WAYS OF SOLVING PSYCODIAGNOSTIC TASKS BY STUDENTS-PSYCHOLOGISTS WITH DOMINANCE OF DIFFERENT STYLES OF THINKING

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Abstract: The article is devoted to the experimental research of efficiency of solving psychodiagnostic tasks by the students-psychologists with different thinking styles. In the theoretical part a style of thinking as a determinant of successfulness is concerned. The hypothesis is the supposition that efficiency and ways of diagnostic tasks made by the students-psychologists are determined by a dominating thinking style. For the examination of the hypothesis the following methods were used: questionnaire "Styles of thinking" by Brams Harrison, the method of experiment (solution of 6 tasks from real consultative practice), content-analysis of protocols and correlation analysis by Ch. Spirman. The research has been done during some years with students of 4 and 5 courses in South-Russian Humanitarian Institute. The results are the following. Students-analysts are rather successful. They demonstrate good diagnostic process, put forward adequate hypothesis and choose adequate methods, but they don't formulate recommendations. For the students-realists it is important to render support to the client and give feedback. The quality analysis showed that they are inclined to individual forms of work. Pragmatics are characterized by chaotic behavior, they don't put forward hypotheses, offer standard methods. Idealists are the worst. They have difficulties in logics and formulating questions to the client. Synthetics on the whole display insufficient success, but they can solve the task correctly due to guessing or hypotheses. Synthetics operate with the methods poorly. Experimental data demonstrate that the thinking style often defines diagnostic search; variety and quality of put forward hypotheses, adequacy of choosing methods of research.

Keywords: psychological diagnostic, styles of thinking, ways of solving psychodiagnostic tasks,

1. Introduction

Psychodiagnostic stage, as it is known, is an initial and main one, because in full it shows further choice of strategies and directions of the work of a psycholinguist with a client. Effectiveness of psychodiagnostic activities is defined by a number of factors, among which the scientists single out the psychologist's possession of generalized psychological theory, correct using of methods and personal peculiarities of a psychologist. But the research of a psycho diagnostic as a subject of professional activities is extremely insufficient. Even in a less degree in literature one can find the works dealing with psychological determinants of the effectiveness of diagnostic search.

L.P. Urvantsev (1983) picked out a specter of factors, describing variability of thinking in diagnostic activities. Their fixation reflected in forming approaches, explaining the process and result of professional decisions:

1. taking into account the difference in cognition as ability;
2. "strategies" approach;
3. concept of cognitive styles;
4. distinguishing the influence of personal qualities on thinking processes (alarm, self-estimation, resistance to indefiniteness, etc.);
5. singling out different "mind qualities" (independence, wideness, depth, quickness, etc.);

6. taking into account difference in cognitive structures, ways of representation of knowledge (complexity of constructive system, subjective psychosemanties, etc.);

7. typological approach (mental and artistic types, individual style of activities);

8. defining of influence of the general personality direction on the peculiarities of thinking (mathematical mental quality, focus on practice or theory, professional preferences, etc.);

9. taking into consideration interrelations of different types of thinking (verbal-logical, visual-imagery or subject-active).[8]

Each of these approaches reflects its peculiarity in displaying diagnostic thinking. A cognitive style is the aspect of solving a diagnostic task, which allows understanding individual and style differences between specialists. To the foreground there appear typical for each concrete personality individual peculiar devices of receiving and processing of information, devices of acquiring new knowledge. Thus, reflexive specialists give more ways of solving the task, and diagnosis with a low level of tolerance substantially increase the amount of collected diagnostic information.[9] A number of differences are observed in the process and effectiveness of solving diagnostic tasks by "the theorists" (inclination to theoretic thinking) and practical persons (with the inclination to a practical type of thinking). For practical people less amount of mistakes in the process of a diagnostic search and more effective solution of the diagnostic tasks on the whole is typical.[9] Interrelations are the following: a) between field dependence and inclination to using less amount of information for diagnosing, b) flexibility and reflexivity with putting forward more hypotheses, c) their little amount with rigidity and impulsiveness.[4] The main difference of field independent from field dependent is the peculiarities of their information-search strategies: "the field dependent use another person as a means of solving problem situations – from here comes a higher need in cooperative and attractive forms of communication, and field independent subjects rest on their own experience, preferring to independently analyze the situation, focus on its content aspects, decent rating while making decisions".[6]

The influence of a cognitive style on the efficiency of solving tasks of diagnostic types was studied by S.V. Rogov (1985). As it is mentioned by S.V. Rogov, probationers, who have reached a high level, acted on the basis of integral features and were distinguished by flexibility. Others under test were observed to have a different set of components, when adequate and full decision is reached with the participation of not intellectual, but perceptional generalization. On the basis of these two mechanisms it appeared possible to characterize different cognitive styles. They are defined by the following parameters: total or detailed approach, switching (flexibility) or rigidity, mainly perceptive or intellectual way of solving the tasks. [7]

The quality and individual peculiarity of psychodiagnostic activities, in the opinion of S.N. Kostromina, are maintained by the individual style of cognitive professional activities, which includes strategies of a diagnostic search, ways of receiving and processing of information, qualities and characteristics of professional thinking. [5]

Realizing the complexity of psychodiagnostic activities, we think that its effectiveness is determined by the totality of different style levels peculiarities of a personality: styles of coding information, styles of processing information (cognitive styles), individual-original ways of putting and solving problems (styles of thinking), cognitive styles. In the framework of our investigation we got limited by studying of styles of thinking. The choice of the style of thinking is determined by the fact, that style characteristics are connected with

activities and behavior, make an impact on a wide range of behavioral reactions and also fulfill a system-creating function.

Styles of thinking are differentiated, first of all, according to goals and means, which different people choose when solving one and the same problem.

There are several classifications of styles of thinking.[1, 7, 3] Thus, R.J. Sternberg made an analysis of three intellectual styles (legislative, executive, evaluative), which are revealed in the choice of professional activity and correspondingly in preferable ways of solving professional problems.[7]

As in our research we use the classification of thinking styles of A.F. Harrison, R.M. Bramson, we shall give their short characteristics.

Synthesator is a person, capable to catch general regularity in details and vice versa – in a general system – the elements it compiles; he notices contradictions in, as it seems, unarguable proofs and concepts.

Idealist is a person adjusted to the search of harmony and agreement between people. He is attentive to alien problems, likes to analyze them and make conclusions. He is a bit conservative in views and habits, may prolong the solution of the problems, hesitating in choice or trying to find a better variant for their implementation.

Analytic is a person, systematically analyzing facts and looking for logical ways of the problem solution. First he collects data, then analyzes them and makes conclusions. He is very attentive to details.

Realist is a person of a concrete direction both in thoughts and actions. He is adopted to realization of his own or other ideas and quick practical result. He is very critical, often intolerant, considers facts, experience and competence the most important. He is able to simplify problems, doesn't like to deal with meditations. He is oriented on the current tasks and doesn't like to look in the far future.

Pragmatic is a brave experimenter and innovator, flexible tactic, well taking into account different possibilities, variants of problems solving. He plans his actions, but his plans are changeable, because he usually acts according to the situation. He doesn't like to wait and is aimed at quick results. Striving to a large profit in future he prefers to get at least part of profit now. He doesn't like long theoretical talks. He is not interested in details of the matter, but only in result.

Judging from what has been written above we suggested that: 1) effectiveness and ways of diagnostic search will depend on the prevailing thinking style of students-psychologists; 2) the most successful in solving diagnostic tasks will be the representatives of analytic and realistic thinking styles.

2. Materials and methods

The research was done together with a post-graduate Atchina A.V. with the students of 4-5 courses of the psychology faculty. 252 people took part in the research.

The research had five stages. At the first stage with the help of the questionnaire of thinking styles by A. F. Harrison, R. M. Bramson the thinking style of students-psychologists was revealed.

At the second stage the probationers were offered to solve 6 psychodiagnostic tasks. All diagnostic tasks were taken from the real practice of psychologists-consultants. When solving the tasks the students were for every task to bring up hypotheses on the reasons of ineffectiveness, find methods adequate to the psychological problem, give recommendations for the solution of the offered problem.

The task solving was analyzed according to the following parameters:

1. Effectiveness of the solution of a psychodiagnostic task – an integral

criterion, which was evaluated according to the three-points scale:

0 points – the solution either utterly wrong or there no solution;

1 point – the solution is partly right;

2 points – the solution is right.

The correctness of the solution was bases on the expert method. In the expertise 10 psychologist-practitioners with work experience of not less than 5 years in practical consultancy took part.

2. The number of stages of diagnostic process.

3. Succession of the stages of diagnostic process.

4. The number of preliminary hypotheses.

5. Adequacy of the hypotheses to symptomatic.

6. The number of methods.

7. Adequacy of methods.

8. Feedback –the presence of the stage of recommendations was taken into account.

The above mentioned parameters let evaluate the level of development of different components of psychodiagnostic activities: logical component was presented by the criteria and succession of stages of diagnostic search and also by the number and adequacy of suggested hypotheses; semiotic element – by the criteria of adequacy of hypotheses to the symptomatic and adequacy of methods; technical component was evaluated by the amount of suggested methods and their adequacy; deontological component was presented by the criterion of feedback.

At the third stage these tasks were solved by 10 experts – professional psychologists with working experience of more than five years.

At the fourth stage with the help of content analysis individual protocols were studied and singled out categories were fixed:

1) search of the problem / infringements;
2) search of resources;
3) search of solutions;
4) questions to the client;
5) the support of the client;
6) neutrality of description;
7) “non-professional judgments”.

At the fifth stage with the help of the Ch. Spirman correlation analysis the peculiarity of solving psychodiagnostic task by the students-psychologists with different styles of thinking revealed.

3. Result

The results of the correlation analysis give us the opportunity to analyze regulative, processional and content characteristics of solving psychodiagnostic tasks of the representatives of different styles of thinking.

The analytical style of thinking is positively connected with the effectiveness of task solving (r=0,27, by p=0,01), adequacy of the put forward hypotheses (r=0,24, by p=0,01) quantity (r=0,26, by p= 0, 01), and adequacy of the methods (r=0,38, by=0,01) and the direction to the search of solutions (r=0,18, by p=0,05). In the content sphere it means that the students with analytical style of thinking very solve psychodiagnostic tasks successfully, because they have a developed logical and gnoseological components of psycho analytical activities. In the scheme of the diagnostic process they omit 1-2 stages, put forward hypotheses and suggested methods are always adequate and lead to a correct psychological diagnosis. Analysts do not allow breaking professional ethics, focus on the search of resources when solving the task. Analyst-students often omit the stage of recommendations and don’t give support to a client.

Realistic style of thinking is positively connected with the number of diagnostic process (r=0,28, by p=0,05), feedback (r=0,47, by p= =0,01), skill to support the client (r=0,27,, by p=0,01), the

quantity of questions (r=0,58, by p=0,01). It means that the effectiveness of the solution of psychodiagnostic tasks by realists is connected with the number of stages of a diagnostic process and completeness of the received information. For the students with the realistic style of thinking it is fairly important to render support to the client and give feedback. The qualitative analysis showed that they are inclined to individual forms and methods of work. It is probably connected with such peculiarities of a realistic style as orientation on the recognition of the facts, on one's own sensations. It is possible to be reached only working with the client individually. Realistic thinking is characterized also by the concreteness and direction on changing, correction of the situation in the aim of reaching a certain result. This aim at best may be only realized in the individual work of the psychologist with the client.

For the probationers with a pragmatic style of thinking the common feature is a curtailed scheme of a diagnostic search (102 stages) with an often frequent omission of the stage of hypotheses and methods. Students-Pragmatics are concentrated on the search of the problems and variants of solutions, they don't forget about recommendations and the client support, but often breaks the rules of professional ethics. The pragmatic style of thinking has a negative connection with inclination to the use of non-standard methods when solving psychodiagnostic tasks (r= - 0,41, by p= 0,05). It says that the more pragmatic style of thinking dominates the subject's diagnostic activities, the less he uses non-standard variants of psychodiagnostic tasks, and more often he limits himself with using standardized methods. It is rather connected with some material and mundane character of a pragmatic, his aim to receive a final result.

Idealistic style of thinking has negative interactions with a large number of parameters of task solving: quantity (r=0,60, by p=0,01) and succession of stages of diagnostics (r=0,28, by p=0,01), quantity (r=0,33, by p=0/01) and adequacy of methods (r= 0.18, by p=0,05), direction to the search of the problem (r= -0,26, by p=0,05) and the ability to ask the client questions (r= -0,28, by p=0,01). Positive interrelation is revealed only with the category of "search of resources" (r=0,22, by p=0,05). Therefore it is possible to say that idealistic thinking style of the students hurdles the successful solution of diagnostic tasks, defining only a positive vector in the search of a diagnostic decision.

Synthetic thinking style of the students is meaningfully very positively connected with the amount of the put forward hypotheses (r=0,21, by p=0,0,05) and their adequacy of the declared symptomatic (r=0,48, by p=0,01), negatively – with adequacy of the methods (r-0,18, by p=0,05), ability to give feedback (r= -0,12, by p=0,55) and efficiency of the task solution (r= -0,15, by p=0,05). That is the more synthetic style is expressed, the less successful are the students in solving psychodiagnostic tasks. The efficiency of psychological diagnosis by the synthetics depends on the amount and adequacy of hypotheses put forward and also on the direction to the search of solutions. The students-Synthesators have a weakly developed gnoseologic and technical element of the diagnostic activities.

4. Conclusion

On the basis of the receive data it is possible to make the following conclusions:

1. Thinking styles influence the effectiveness of diagnostic tasks differently: the most successfully the tasks are solved by the representatives with analytical style of thinking, the less successful – the subjects of idealistic style.

2. During the diagnostic tasks solving (when the real client is absent) the subjects demonstrate dialogization of thinking: they formulate questions to the client, render support to the client and give feedback.

3. Processional and content characteristics of solving psychodiagnostic tasks by the students with dominance of different thinking styles are rater variable.

4. Characteristic features of the psychodiagnostic tasks solving of the representatives of pragmatic styles of thinking is the use of standardized methods, of the representatives of idealistic style of thinking is inclination to individual forms of work.

5. To sum it up, in the present work regulative, processional and content characteristics of the psychodiagnostic tasks solving by the students-psychologists with different thinking styles are concerned.

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PECULIARITIES OF SOCIAL AND COMMUNICATIVE COMPETENCE OF TEENAGERS WITH DIFFERENT THINKING STYLES

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Abstract: This article deals with the studying of the peculiarities of social and communicative competence in teenage years. The paper provides the results of the comparative analysis of the peculiarities of social and communicative competence of teenagers with different thinking styles.

Keywords: competence, social and communicative competence, teenage years.

1. Introduction

A large number of works is devoted to studying of various aspects of social and communicative competence. So, this issue was researched by B. G. Ananyev, G. M. Andreeva, A. A. Bodalev, Yu. N. Yemelyanov, Yu. M. Zhukov, N. V. Kalinina, N. V. Kuzmina, V. N. Kunitsyna, A. A. Leontyev, L. A. Petrovskaya, V. V. Sokolova, G. S. Trofimova, etc. However, there is no single definition of this concept. For example, S. E. Anfisova specifies that "… social and communicative competence acts as readiness of the subject to acquire information in dialogue, to present and hold his point of view on the basis of acknowledgment of the variety of positions and respect for the values of other people, to carry out productive cooperation with the members of the group solving the general problem"[1].

Particular attention is paid to teenage years as the key stage of the social competence formation. The issues dealing with the development of social and communicative competence of teenagers are reviewed in the works by G. N. Artemyeva, B. G. Ananyev, A. N. Leontyev, B. R. Lomov, G. M. Andreev, S. V. Znamenskaya, S. Z. Yenikeeva, I. P. Kravchenko, I. V. Kuzmenko, J. P. Allen et al., C. L. Hanson et al., MacKinnon-Lewis et al.

Thus, the significance of this research is caused by the necessity of development of the problem of social and communicative competence and its formation in teenage years.

In this regard, *the objective* of our research is studying of social and communicative competence of teenagers with different thinking styles.

The research subject is social and communicative competence of teenagers with different thinking styles.

The research object is pupils of teenage years.

The research hypothesis: social and communicative competence of pupils with different thinking styles will have its peculiarities.

2. Methods and results

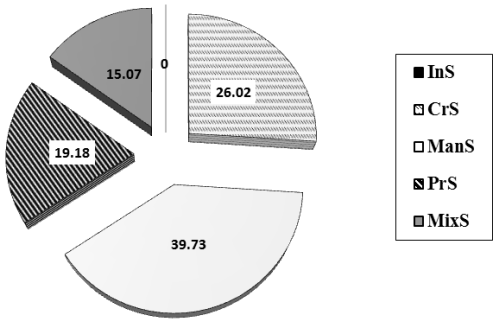
The research techniques: Technique "Thinking Style" (A. K. Belousova), Questionnaire - test "Social and Communicative Competence"; Statistical data processing methods (descriptive statistics, Mann - Whitney U-test).

The research base: 73 pupils of both sexes from the general education schools of Rostov Region at the age of 13-14 years old took part in the research.

According to the targets of our research, the diagnostics focused on detection of the prevailing thinking styles of the pupils was carried out.[4] The analysis of representation of the thinking styles as a

whole in the group has revealed the following results (Figure 1):

Figure 1. Frequency of occurrence of the prevailing thinking styles in the group of teenagers.



Identification marks: InS – initiative style (0%), CrS – critical style (26.02%), ManS – managerial style (39.73%), PrS – practical style (19.18%), MixS – mixed style (15.07%).

As illustrated in Figure 1, the managerial thinking style most often prevails in the group of pupils (39.73%). Aspiration to coordinate the participants' activity, organizing it, integrating others, carrying out the managing influence, is typical for them, i.e. the activity organization and management are preferable for them. Modern research of thinking styles [2] allows also speaking about some personal and individual peculiarities of the respondents depending on the prevailing thinking style. Thus, the senior pupils inclined to domination are distinguished by field dependence, externality, demand for cognition, creativity, motivation for achievement and power, orientation on change of themselves, low rigidity.

The critical style is on the second place according to the frequency of occurrence (26.02%), i.e. this group of pupils has an expressed ability to notice weak points, mistakes, and any defects. They are distinguished by scepsis, prudence, criticality, orientation to business, practicality, motivation for achievement, internality, severity, field dependence, low sensitivity, reality of judgments, rigidity, pessimism, and heuristic competence. In 19.18% of the time the pupils have the prevailing practical style of thinking that is revealed in their ability to choose the possibility of practical use of various ideas. They aspire to bring the realization of the problem to the logical end and only after that they can work over other ideas.

Among 15.07% of pupils one couldn't succeed to reveal one specific prevailing style of thinking that is an evidence of domination of two-three functions at the same time.

It is interesting that none of the asked pupils has the prevailing initiative style of thinking (0%).

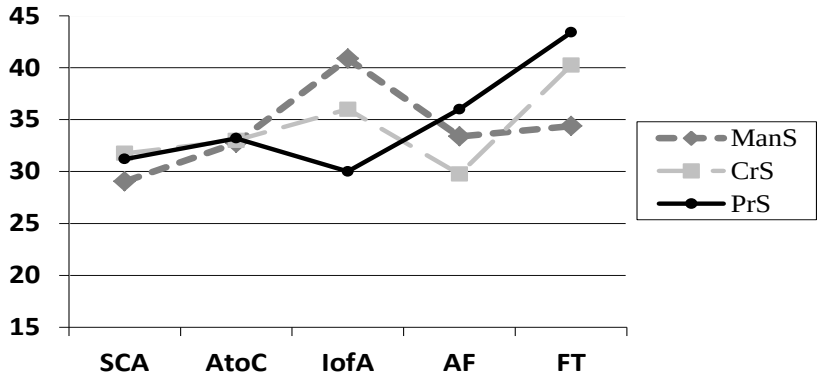
On the basis of the obtained data all the sampling of the examined pupils was divided into three research groups:

- **the 1st group –** the pupils with the prevailing managerial style of thinking;
- **the 2nd group –** the pupils with the prevailing critical style of thinking;
- **the 3rd group –** the pupils with the prevailing practical style of thinking.

The pupils with the prevalence of several thinking styles didn't take part in further research in connection with small number of sampling.

According to the objectives of our research we carried out the analysis of the peculiarities of social and communicative competence of the pupils with different thinking styles (Figure 2).

Figure 2. Degree of expressiveness of basic components of social and communicative competence of the pupils with different thinking styles



Identification marks: SCA – social and communicative adaptability, AtoC – aspiration to consent, IofA – intolerance of ambiguity, AF – avoiding of failures, FT – frustration tolerance.

As illustrated in Figure 2, in the group of the pupils with the prevailing managerial style of thinking, the social and communicative adaptability has the expressiveness degree below the average (x=29.05, by σ=2.96, m=1.05), and the intolerance of ambiguity, on the contrary, is expressed above the average (x=40.88, by σ=2.64, m=0.93). All other components of social and communicative competence: aspiration to consent (x=32.75, by σ=5.84, m=2.06), avoiding of failures (x=33.37, by σ=4.92, m=1.74) and frustration tolerance (x=34.37, by σ=4.59, m=1.62) have the average expressiveness degree.

Thus, we can assume that the pupils with the prevalence of managerial style of thinking are distinguished by plasticity, flexibility in communication, ability to interact with the most various people. They easily adapt to the changing circumstances, easily overestimate the events, and actively find themselves, their place in them. Aspiration to follow the clear, firm views of things, affairs, acts, moral certainty, orthodoxy of thinking, unambiguity of perception, lack of fear to discrepancy of opinions, difference of views, aspiration to solve all the problems "through peaceful means" are typical for them. In most cases they believe in themselves, their abilities, they are cheerful, merry, but in some situations they can be also dependent, mistrustful, and suspicious. They are distinguished by emotional stability in most cases, the average degree of self-control and self-regulation of emotional conditions, self-command in emotiogenic situations.

The pupils with the prevailing practical style of thinking have the components – the degree of social and communicative adaptability (x=30.66, by σ=4.93, m=2.84) and avoiding of failures (x=29.66, by σ=2.88, m=1.66) below the average, at the same time, the degree of frustration tolerance is expressed above the average (x=41.33, by σ=8.14, m=4.70). The components - aspiration to consent (x=33.00, by σ=3.00, m=1.73) and intolerance of ambiguity (x=36.33, by σ=1.52, m=0.88) have the average degree of expressiveness.

So, we can assume that the pupils with the practical style of thinking are

distinguished by flexibility in communication, ability to interact with people, to adapt to the changing circumstances easily, love of life, self-confidence, belief in their own abilities, cheerfulness and enthusiasm, but at the same time, the instinct of self-preservation can be absent, the reasonable risk level is exceeded. Low self-control, extravagance, excitability, unwillingness "to stay in control", verbal, speech intemperance, aspiration to have the point of view on each matter and to defend it, are typical for them, but, if necessary, they can make a compromise; moral certainty, orthodoxy of thinking, in combination with respect of conversation partner's opinion.

In the group of the pupils with critical thinking style the underestimated degree of expressiveness of intolerance of ambiguity (x=30.50, by σ=2.58, m=1.05) and the overestimated degree of frustration tolerance (x=43.66, by σ=6.97, m=2.84) are revealed. The level of social and communicative adaptability (x=34.16, by σ=3.92, m=1.60), aspiration to consent (x=33.16, by σ=5.11, m=2.08) and avoiding of failures (x=35.66, by σ=4.27, m=1.74) has the average degree of expressiveness.

So, we can assume that for the pupils with critical style of thinking aspiration to follow the clear, firm views of things, affairs, acts, moral certainty, orthodoxy of thinking, unambiguity of perception, fear of uncertainty, surprises, inability to wait which leads to rash and premature actions, is typical. On the one hand, sociability and openness are typical of them, but, on the other hand, they can demonstrate some shyness, modesty, lack of self-confidence. They are distinguished by absence of fear to discrepancy of opinions, difference of views; aspiration to have the point of view on each matter, in combination with the aspiration to solve all the problems "through peaceful means", to come to agreement.

For checking of the made assumptions we carried out the statistical analysis of the obtained data with the help of Kruskal–Wallis test (Table 1).

Table 1. Significance indicators of distinctions of expressiveness degree of the components of social and communicative competence of teenagers with different thinking styles

	SCA	**AtoC**	**IofA**	**AF**	**FT**
χ^2	11.470	.059	12.667	10.666	11.039
DOF	2	2	2	2	2
Asympt. signif.	0.009**	.971	0.006**	0.044*	0.035*

Identification marks: * - significance at the level of 0.05, ** - significance at the level of 0.01

As shown in Table 1, the definitely significant distinctions are revealed in the expressiveness degree of social and communicative adaptability (H=11.470, p=0.009) and irreconcilability of ambiguity (H=12.667, p=0.004). The significance indicators of distinctions in the expressiveness degree of avoiding of failures (H=10.666, p=0.044) and frustration tolerance (H=11.039, p=0.035), being the evidence of availability of distinctions, but not proving their significance, entered into the so-called "ambiguity area". The distinctions in the expressiveness degree of aspiration to consent are not significant.

3. Discussion and conclusion

Thus, we can tell that the average expressed aspiration to consent, shown in absence of fear to discrepancy of opinions, in aspiration to solve the problems without conflicts, is common for all pupils.

So, the pupils with different thinking styles differ from each other by different degree of expressiveness of social and communicative adaptability and intolerance of ambiguity. So, one can say

that the teenagers with the prevailing managerial style of thinking are distinguished by aspiration to follow the clear, firm views of things, affairs, acts, moral certainty, orthodoxy of thinking, unambiguity of perception, without half tones, fear of uncertainty, surprises. Plasticity, flexibility in communication, ability to interact with the most various people, easy adaptability to the changing circumstances, fast revaluation of the events and adaptation to them are typical for them.

The teenagers with domination of the practical style of thinking are distinguished most of all by love of life, self-confidence, belief in their own abilities, cheerfulness and enthusiasm, but at the same time, the instinct of self-preservation can be absent, in combination with exceeding of the reasonable risk level. Low self-control, extravagance, excitability, unwillingness "to stay in control", verbal, speech intemperance are typical for them. Thus, they are rather flexible in communication, easily cooperate with the surrounding people, easily adapt to the dynamically changing conditions and circumstances.

The teenagers with the prevailing critical style of thinking are characterized by tolerance revealed in the ability to take the opinion, the character of other people without irritation and hostility, but when meeting a barrier, with impossibility to get the desirable thing they become irrestrainable, excitable, in combination with demonstration of verbal aggression. Thus, as a whole, they are rather open and sociable, however, in certain situations they are shy, avoidant, unsure of themselves as in the interlocutor, show some constraint in communication.

Thus, the hypothesis of our research was completely confirmed.

The problem of communication is one of the most important and difficult in psychology. Communication is considered as process, condition of implementation of different forms of human activity, as means of achievement of different objectives and satisfaction of different needs, as independent activity. Social and communicative competence is defined by G.S. Trofimova, as "…. the integrative ability based on humanistic qualities of the personality and directed on ensuring the productivity of the communicative activity, caused by the experience of interpersonal communication of the personality, the level of his proficiency, manner and personal growth"[3].

In our work the problem of thinking styles was also touched; it is actively studied by A. A. Alexeev, L. A. Gromov, R. J. Sternberg, A. K. Belousova, G. A. Berulava, L. Ya. Dorfmann, K. Korostelina, A. V. Libin, V. I. Morasanova, I. G. Skotnikova, I. N. Trofimova, M. A. Kholodnaya, I. P. Shkuratova, etc. The analysis of the reading matter on the studied problem showed that in domestic and foreign literature there are practically no works on studying of the peculiarities of thinking style of the senior teenagers, and researches devoted to studying of social and communicative competence of the teenagers with different thinking styles are not presented at all.

At the same time, the teenage years are the sensitive period for formation of social and communicative competence which is one of the key elements of successful self-realization.

As a result of our research the general and the specific peculiarities of social and communicative competence of teenagers with various thinking styles were revealed. These results can be used by developing of therapeutic and intervention programs directed on increasing of both communicative, and social and communicative competence.

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IMPLEMENTATION OF BOLOGNA PROCESS AT THE SS. CYRIL AND METHODIUS UNIVERSITY IN SKOPJE: A VIEW FROM INSIDE

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Abstract. This paper deals with the description of the reforms in higher education in the Republic of Macedonia, made in the last decade. More precisely, the aim of this study is to discuss the implementation of Bologna principles in Ss. Cyril and Methodius University by comparing the reports from both the internal and the external evaluations in two follow-up periods (between 2002/03 and 2005/06, and between 2006/07 and 2009/10). Several official documents are analyzed for this purpose. The results show that the European credit transfer system (ECTS) in first and second cycle of studies is applied in every member of the University and a number of positive changes have been made in all areas of its activity. However, some expected difficulties and weaknesses are pointed out, due to the objective economic situation in the Republic of Macedonia or to the subjective understanding of "Bologna philosophy". Apart from official reports, a view from inside can bring on surface additional examples of ECTS misinterpretation and illusion of progress. To avoid the catch of distorted Bologna, it is suggested all participants in this process to take seriously recommendation for improvement given by European University Association.

Keyword: Bologna Process, ECTS, implementation, Ss. Cyril and Methodius University, Republic of Macedonia

1. Introduction

In 2000 the Republic of Macedonia started the process of changes in higher education system, when Ministry of Education and Science passed the new Low giving greater autonomy to higher education institutions. According to it, universities were obligated to reform curricula following the principles of the Bologna Declaration. On 19th September 2003, the Republic of Macedonia became a member of the European family of countries committed to implement the recommendations of Bologna. The same year the Bologna Follow-up Group was established with representatives from the universities, Ministry of Education and Science and student organizations. This group, with collaboration of domestic and foreign experts, prepared the legal framework for Bologna principles implementation. Starting at 2002/03 and up to 2005, most of the faculties in Republic of Macedonia have decided to implement ECTS. In 2008 the Ministry of Education and Science prepared and passed new updates of the Law on Higher Education. Priority areas for legal intervention were: the degree structure, enhancement of the university-faculty relation promoting an integrated university, establishment of joint degrees, enhancement of life-long learning, increased student involvement and establishment of a legal basis for national loans and grants.[12]

The Ss. Cyril and Methodius University in Skopje (Hereafter named University or abbreviated UKIM) is the oldest state university in the Republic of Macedonia, founded in 1949, initially with three faculties: the Faculty of Philosophy, the Faculty of Medicine and the Faculty of Agriculture and Forestry. At the moment, the University represents a functional community of twenty-three faculties from all scientific fields: natural sciences, technical and technological sciences, medical sciences, biotechnical sciences, social sciences, humanities and arts. Also, UKIM comprises 5 research institutes and 11 joining member institutions. Its operations are regulated by the Higher

Education Act and the Statute of the University. The most important legal document of the University is the Statute, which is approved by the Parliament of the Republic of Macedonia.

The process of change at UKIM began some time before the adoption of the Higher Education Act in 2000.[9] It was the first university in Republic of Macedonia who started the Bologna reform and implementation of ECTS in academic year 2002/03. In 2003 the University requested an institutional evaluation by the European University Association (EUA) [2]. The initial evaluation was made by an expert team and a set of recommendations were offered, concerning structural reorganization, internal quality assurance development, teaching and learning, research and finance.

Considering the guidelines from the External Evaluation Report, UKIM initiated reorganization procedures in order to achieve the European norms and standards in all spheres of its activities. Due to the fact that UKIM is a large university, the priority of reforming it into an integrated university with centralized management and administration was slow and difficult task. Since it is a dynamic process, a follow-up evaluation was indispensable to give feedback on what had been achieved and what was to be done further. In 2008 the self-evaluation and external evaluation on progress made in the period between 2002/03 and 2005/06 were carried out. The recommendations for improving the quality that emerged from this reports were supposed to be aligned with the Law on Higher Education from 2008. To this effect, the new Statute, in accordance with the new legal regulation, had to be prepared and enacted. At the end of 2008 the new Statute came into force, and the subunits of the University prepared 'Regulations'. The process of curricula reform according to the ECTS, was completed in the academic 2008/2009. Regarding the readjustment of the undergraduate study programs on the level of the entire University, the model 4 + 1 was accepted by the majority study programs. Some of the faculties embraced the 3 + 2 model or model of integrating both undergraduate and graduate study programs for the period of 5 or 6 years.

In order to become an autonomous, integrated university, UKIM undertook activities for the harmonization of the functions and entire domains of activity with the new legal framework. The main benefits of the integrated university supposed to be the increased transparency of all academic proceedings and providing a joint budget that enable individual faculties to undertake projects which would otherwise be unavailable. Together with a new organizational structure, integration consisted of collective regulations regarding the quality assurance mechanisms, the structure of the programs of study, the procedures for appointing academic staff, organization of teaching etc. The new legislation also has changed the previous practice of earning a Doctoral degree. Establishment of the third cycle of study – Doctoral studies was one of the most important reform in higher education in Republic of Macedonia. In 2010 UKIM adopted the *Regulations, criteria and rules of admission to doctoral level studies*, and its implementation started the next academic year with programs of study that had been accredited. In 2011 the second follow-up self-evaluation and external evaluation took place in order to find out how UKIM evolved since the previous evaluation. Finally, this academic year (2012/2013) UKIM is in the process of harmonization of study programs with the latest amendments to the Low on higher education [13], the Statute and other legal acts.

2. Research problem and method

Taking into account that the last decade was the most challenging for the Higher education institutions in Republic of Macedonia, this paper discusses how

UKIM has changed in order to improve in the period between two follow-up evaluations. More precisely, the aim of this study is:

- to analyze the implementation of Bologna Declaration in UKIM through the lens of the commission for self-evaluation and the external one;
- to compare the reports (2008 and 2011) from both the internal and the external evaluations in two follow-up periods (between 2002/03 and 2005/06, and between 2006/07 and 2009/10);
- to compare my personal view, as a member of academic staff in UKIM, regarding the Bologna implementation, with the results of the evaluation.

It is hypothesized that evaluation reports from 2011, compared with the ones from 2008, show progress in the process of Bologna implementation in UKIM, both from the part of the commission for self-evaluation and the external one. Further, it is postulated that implementation of Bologna principles and ECTS in UKIM is not quite adequate to the proposed directions regarding curricula, students' assessment, professor: student ratio, teaching practice, learning outcomes, availability of literature etc. (Bologna vs. 'Bologna')

The verification of the postulated theses is carried out through the comparative analysis of the following official documents:

- Summary of the Self-evaluation Report of the Ss. Cyril and Methodius University in Skopje in the period 2002/03-2005/06 (2008);
- Ss. Cyril and Methodius University EUA Follow-up Report in the period 2002/03-2005/06 (2008);
- Summary of the Self-evaluation Report of the Ss. Cyril and Methodius University in Skopje in the period 2006/07-2009/10 (2011);
- Ss. Cyril and Methodius University EUA Follow-up Report in the period 2006/07-2009/10 (2011).

3. Results

The main goal of Bologna Declaration [11] was to establish European area of higher education with the following objectives: 1. Adoption of a system of **easily readable and comparable degrees** through the implementation of the Diploma Supplement; 2. Adoption of a system essentially based on **two main cycles**, undergraduate and graduate; 3. Establishment of a **system of credits (ECTS)** 4. Promotion of **mobility** for students, teachers and researchers; 5. Promotion of European co-operation with regard to **quality assurance**; 6. Promotion of **European dimension** into higher education.

UKIM accepted Bologna Declaration as its strategy with the following priorities [5]:

- Development and preservation of the academic autonomy,
- European Credit Transfer System full implementation,
- Harmonization and compatibility of the study programs with the EU model of university,
- System of Quality assurance with evaluation and accreditation of study programs,
- Student and academic staff mobility,
- Openness to all students on the basis of equality,
- Promotion of life-long learning,
- Readable and comparable degrees.

According to the EUA follow-up report from 2008, the Bologna process is being implemented in UKIM, with some expected difficulties. Taking into account the recommendations offered in the initial external evaluation from 2003, the EUA team estimated the degree of implementation of each recommendation concerning **structural reorganization**,

internal quality assurance development, **teaching and learning**, **research**, **spending and finance**. It was concluded that recommendation for the new internal structure for UKIM as an integrated university had not been implemented as the previous law on higher education did not provide the adequate framework for it. Concerning **internal quality assurance development**, it was noticed that in 2006 the University set up an evaluation commission that started working with EUA 2003 recommendations and developed plan for following up the progress. As a result of these activities, the commission produced a self evaluation report analysing the period between 2002-2003 and 2005-2006. Further, while efforts had been made to University-wide implementation of ECTS with internal credit transfer first, it was pointed out that some staff members remain reluctant to adopt the new structure and that intra-university transfers were very rare in the analyzed period. Also, in some cases curricula reform led to increased workload for both teachers and students, that implies need for rationalization. Regarding changes in the system of student assessment and examination, it was underlined that efforts to reduce subjectivity in student assessment could produce risks in going too far in automatisation of the examination process. Further modernization of teaching methods and student centered learning was recommended in forthcoming period and for this purpose teachers training in interactive methodology was encouraged. The problem of brain drain remained unsolved because of the overall conditions in Macedonia and it was suggested the University to develop measures to provide better employment opportunities for the recent graduates within the country. Concerning research, it was noted that in the analyzed period the University had not established a centralized research body, but some steps were made toward partnerships with higher education institutions abroad to award joint degrees and to increase international research performance. It was suggested to stimulate interdisciplinary research and more efforts to be made trying to convince the government to increase its funding of research from 0.25 % to 3% of GDP, being European Union goal for research funding. Finally, the follow-up evaluation team noticed that the criteria for allocating funds are not clearly stated and the financing system of Macedonian universities should be reformed to a transparent one.

EUA follow-up report from 2011 for the period between 2006/07-2009/10 showed that UKIM had evolved since 2008 especially in the process of integration of faculties, implementation of EKTS and internalization. The full implementation of the **University integration** involved new regulations related to a new organisational structure, changes in academic procedures and a joint financial model. An appropriate level of autonomy had been retained at faculties. The Senate became the highest governing body of the University and students' participation in Senate increased to 18 % of the total. Also, the new low from 2008 restructured independent student union into student parliament. However, the evaluation team listed the following recommendation for the forthcoming period to be accomplished: 1.to decrease paperwork and workload related to procedures at faculty level; 2.to consider further possibilities for merging institutes with related faculties; 3. to promote further development of trans-faculty learning opportunities into study programs, including a major and a minor, or even double degrees; 4. to reinforce the administrative staff through appropriate training to face challenges of the integration process; 5. to build a comprehensive central Quality Assurance policy and framework.

Regarding **implementation of ECTS and Bologna process**, the evaluation team stated that ECTS is implemented at the whole UKIM. Students

welcomed the new regulations related to the appointment of academic staff, as well as quality of teaching and transparency in assessment. Along with the old model of achieving PhD, the new law had introduced a new model for doctoral studies to be put into effect, and it was the major challenge for the University to plan ahead its organization. The recommendations for improvement in this area were the following:1. to clarify what the ECTS and the Bologna process actually represent in order to overcome unequal understanding across the UKIM ; 2. to find ways to remove the student view of "barriers" between teachers and students; 3. to modernize teaching methods; 4. to develop a more explicit approach to staff development (training programs).

Finally, it was reported that UKIM put into practice several funding arrangements for students and staff **mobility and internationalization**:

- **BASILEUS** (Balkan Academic Scheme for the Internationalization of Learning together with EU Universities) 2008/09,
- **JoinEU-SEE Erasmus Mundus** (academic mobility between countries of the EU and the Western Balkans) 2009/10,
- **ERASMUS** Life Long Learning.

Also, UKIM participated in several projects supported by European funds and it was the first Macedonian university that organized joint degrees with several other European universities. However, the number of exchanges was very small, and evaluation team recommended to increase the number of exchange students by offering more courses taught in English language and to stimulate staff exchanges through grant schemes.

Comparison between two follow-up self-evaluations shows that UKIM has made a number of positive transformations in all areas of activity and that in this period efforts have been made to follow recommendations arising from the Bologna process and suggested by EUA evaluation team. Besides the structural reorganization leading to the University integration, progress has been made in implementation of ECTS (efficiency of the process of studies, quality of teaching, access to relevant literature etc), in opportunities for students to apply for EU programs and scholarships, as well as in mobility of staff and postgraduates for research and lectures (Table 1.). A step forward is made in giving students legal right for representation in every managing body of the University and the faculties, participation in the self-evaluation process and assessment of the teaching staff [1].

Table 1. Comparison between some results from Self-evaluation reports in two follow-up periods (UKIM, 2008 and 2011): positive changes

Period 2002/03- 2005/06	**Period 2006/07- 2009/10**
ECTS implementation - Replacement of fixed courses with obligatory, elective or optional ones (increased number of elective courses); - New forms of continuous assessment; - Teaching is moving towards becoming student-centered; - Earning a Doctoral degree on the basis of supervised preparation and defense of thesis (not designed according to the ECTS) ; - High percentage of students who use	**Reorganization** - Integration of the University; - New normative acts **(**Regulations, Criteria and Rules) ; - Increased students participation in governing bodies; - Quality assurance procedures; - Integrated publishing at the University. **ECTS implementation** - Introducing doctoral studies - Increase in the number of awarded

photocopied materials (73%).

Students
- Effectiveness of studying is improved, but still not up to the desired level;
- Completely informed regarding the rules of study (24%);
- 76% of students regularly attend lectures;
- Outflow of qualified graduates from the country, primarily as the result of the unfavorable circumstances on the labor market;
- 73% of students have access to the prescribed readings through using photocopied materials;
- National structure of students**:** 14,39% students who are not ethnic Macedonians.

Mobility, networking and internalization
- Signing of over 70 bilateral cooperation agreements;
- TEMPUS program (76 joint European projects);
- Utilization of 350 grants for individual mobility within the member countries of the EU and Central and Eastern Europe.

Master degrees (25,89%)
- Progress in the quality of teaching and respecting students opinions
- Progress in compatibility and comprehensibility of the literature
- Decreased percentage of students who use photocopied materials (59%)

Students
- The success rate of the students has increased;
- Completely informed regarding the rules of study (35%);
- The level of accessibility of information for students has improved;
- Higher efficiency of the process of studies (shortened average duration of the studies) ;
- Improvement in class attendance and fulfillment of the assignments of the students;
- National structure of students**:** upward trend in the number of students who are not ethnic Macedonians (20,07 %);

Academic staff
- Increased number of associates that have Master degrees;
- Criteria regarding the procedure for the appointment of academic staff.

Mobility, networking and internalization
- BASILEUS (2008/09) ;
- JoinEU - SEE Erasmus Mundus (2009/10);
- ERASMUS Life Long Learning;
- 120 students from UKIM studied at European HEI;
- 27 students from Europe studied at UKIM.

Besides these good practices, comparative analysis of the reports indicates some areas to be work on further because of status quo or even deterioration (Table 2). One serious problem that is emphasized in both evaluation reports of UKIM is the **ageing of the academic staff**. Obviously, in the period between two evaluations not much has been done to improve the situation. The fact is that it is almost impossible to replace retired professors as the government does not allow it. The result is that total age structure at the University is dominated by the academic staff of the age group over 45 years, with variations across the scientific

domains. This situation have impact on **overburdening of the actual academic staff** and, subsequently, on the quality of teaching. The average professor- assistant and professor/ assistant-students ratio at the University is far from desirable and this situation is still worse on more attractive study programs where courses are taught with large number of students. Of course, the large number of students in relation to members of the academic and associate staff encumbers the proper implementation of the ECTS.

The results of the student surveys in both evaluation periods show that students constantly complain about **extensive content of the subjects**, **overload assignments**, not clearly formulated **exam questions** and lack of opportunities of gaining **practical knowledge and skills**. Regarding **student mobility**, there is very low level of awareness of the existence of the exchange program and still small number of students utilized the given opportunity.

Table 2. Comparison between some results from Self-evaluation reports in two follow-up periods (UKIM, 2008 and 2011): without changes or decline

Period 2002/03 - 2005/06	**Period 2006/07 - 2009/10**
Students - Students are overloaded due to the increased number of classes per week and other assignments; - Lack of practical training in addition to acquiring theoretical knowledge **Academic staff** - Low number of employments; - Age structure (over 70% of full-time professors are older than 55). **Mobility, networking and internalization** - Low percentage of students who have access to information regarding students exchange program. **Funding** - The Government does not provide additional financial support for Bologna process implementation; - Reduced inflow of assets from the budget due to accreditation of other state universities.	**Misunderstanding of the ECTS** **Students** - The extensive content of the materials needed for exam study; - The large student groups causing overcrowding during classes and lectures; - Lack of opportunities of gaining practical knowledge and skills; - Lack of information regarding internal and external student mobility, as well as regarding the labor market and employment opportunities. **Academic staff** - Low number of employments (no replacement of retired professors) ; - Decrease of 3,1% in the academic teaching staff; - Decreased number of associates with Doctoral degrees; - Age structure (75% of professors above 45 years old); - Deficiency of younger academic teaching staff with academic titles (assistants mostly 25-35, and above); - Overburdening of the academic staff, especially assistants: • professor: assistant – 2:1 • professor: students – 1:25 • assistant: students – 1:45

Mobility, networking and internalization
- Low level of awareness of the existence of the students exchange program (19%) and the Erasmus coordinators (12%).

Funding
- Lack of additional public funding for supporting the integration;
- One University account for funds allocated by the Budget of the RM.

4. Conclusion

This paper is focused on the evolution of the Bologna Process implementation at the Ss. Cyril and Methodius University in Skopje in the period between 2002/03 and 2009/10 as being self-evaluated and evaluated from EUA commission. According to the reports from both of them in two follow-up periods, it could be concluded that the ECTS in first and second cycle of studies is applied in every member of University and a number of positive changes have been made in all areas of its activity.

Nevertheless, there are still weaknesses due to an objective economic situation in the Republic of Macedonia or to a subjective understanding of "Bologna philosophy". And this is not a case solely in Republic of Macedonia. As it is stated in the EUA follow-up report (2011, p.148) "In many European countries, the process has been used by governments to introduce and/or achieve reforms that are not really related to Bologna." Report on progress in quality assurance in higher education, published by the European Commission in 2009 emphasizes that the standards are misinterpreted and "they are seen either as a checklist or formal requirements, as a code of good professional practice, or as soft guidelines".[4] Kurelić (2009) also points out that Bologna Process had been misrepresented in Croatian higher education and it is distortion of the original idea (Bologna vs. 'Bologna'). Rodin (2009) interprets the huge discrepancy between the goals envisaged by Bologna Declaration and its implementation in Croatia with the lack of common understanding of the key elements of the process. It happens when there is no genuine will to significantly change the tradition of higher education, but rather to satisfy formal requirements.

Speaking of UKIM in this respect, EUA evaluation team found unequal understanding across the University of what the concept of student-centered learning is, what learning outcomes actually are, and how they could help improving teaching and learning processes. It is recommended faculties to describe their education in terms of learning outcomes, competences, and the appropriate qualification framework.

My personal view regarding the Bologna implementation, as a member of academic staff in UKIM, partly overlap with the reports, but still there are week sides that are not bring on surface and may give illusion of progress. For example, the low drop-out rate and quantity of graduates and masters does not mean necessarily the quality, but rather lower criteria for successful achievement. Furthermore, overburdening of the academic staff makes it difficult to have serious approach to each student learning and to research efforts. On the other hand, the same academic staff is asked to achieve high standards for academic promotion, without taking into account that for this purpose sufficient time and budget are needed. In respect of this, more bottom-up approach to

educational policy is desirable. The most obvious example of ECTS misinterpretation is allocation of credits within first and second cycle programs. It seems that credits distribution is formal and that mathematical operation is more important than the meaning of credit as a measure of student load.

If our goal is high quality higher education, it is necessary all participants in this process to take seriously recommendation for improvement and to try to avoid the catch of distorted Bologna.

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MULTICULTURALISM AS IMPORTANT CHARACTERISTIC OF CONTEMPORARY EDUCATION

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Abstract: The introduction of the multicultural principles in education is a result of common processes of modern societies' democratization, requirements for law and respect of the Human Rights and Liberties, the process of globalization and the economic, technological, and cultural connection among peoples and countries.

Multicultural education presents educational program which does not concern only certain minorities, but it also refers to the social groups as a whole, no matter big or small. It refers to every social group which has distinctive culture and to the disparate relations and attitudes that a group develops toward other peoples' cultures. Some authors point out different models regarding multicultural education in Europe and the USA. Different attitudes towards multiculturalism in Europe and the USA arise from various conditions and situations of minorities.

Along with these distinctions go the disparities in educational policy and attitudes towards multicultural education, values, needs, operationalization, etc. If the 'educational ideal' means formation of new citizen that would live in multicultural society, than 'additional' programs for education of children based on interculturalism and multiculturalism must be created. The subject matters of the 'additional' programs should be incorporated in every general educational subject. Schools should play an important role in encouraging multiculturalism, especially the multinational schools, because they are concrete educational institutions where children are taught proper behavior.

Keywords: Multicultural education, multicultural society, cultural diversities (cultural varieties), native language, schooling educational programs.

1. Introduction

Today many contemporary countries are characterized by multiculturalism (cultural varieties), multilingualism, and different ethnic and confessional views. Concerning the fact that the population has multiethnic, multireligious and multicultural views, many attempts have been made to coordinate the mutual varieties and the differences connected with the identity of civic and political unity.

Multiculturalism is used both as descriptive and normative term. It refers to the cultural diversities that come from the existence of two or more groups in a society where people's views and practices generate a characteristic sense of a collective identity. As a descriptive term multiculturalism is inevitably reserved for multiplicity of a community which is based on racial, ethnical and linguistic disparities. As a normative term, multiculturalism refers to people's approval of a local multiplicity based either on the Rights of Respect for different cultural groups and their acceptance or on majority's moral and cultural allegations, opinions and views in a society where cultural multiplicity is present. In this context, multiculturalism admits and recognizes the importance of beliefs, convictions, values and the different ways of life. It prompts self-understanding and encourages the sense of someone's belonging somewhere as an individual or in groups with similar opinions.[5]

2. Basic ideas and educational policies for realization of multiculturalism

The advancement of contemporary countries and multiculturalism are linked too with changes in educational politics too. The introduction of multicultural principles in education is a result of

common processes of modern societies' democratization, requirements for law and respect of human rights and liberties, the process of globalization and the economic, technological, and cultural connection among peoples and countries.

An inseparable part of a national identity is culture, i.e. cultural identity. Multiculturalism is a fundamental organic part of every multinational human community appreciating veneration, supporting connection, and cultural independence. The most common social determination of culture is that the refers to an amount of material and spiritual values created by humanity during the history of social general and historical practice, while the origination of nations and their cultural development throughout time gains a characteristic mark of becoming a certain national culture. Every national culture carries its own specifications, but it also contains universal knowledge and values. Without them a national culture becomes provincial, closed and ghetto-like.

A presumption and organic part of every culture and cultural identity is the language spoken within the family and within the framework of certain ethnical groups. Language is nourished, cultivated, learnt, and developed in a family and certain social and cultural institutions as media, newspapers, radio, television, publishing, etc. Linguists cannot fully agree on how many languages there are. Mackey claims that there are from 5000 to 9000 languages in the world. It is well known that during the history, many millennia (up till 1000), passed with the use of only few dozens of written languages. There were only 5 official written languages in Europe for a period of 1000 years. During the end of the 18th century there were only 15, while in the 19th century the number increased up to 30 languages. The process of decolonization led every new liberated country to ensure legitimacy for its own language or languages. Mackey, Canadian expert on bilingualism, points out that national politics in every modern country seeks to impose 'official language', besides the fact that some of those countries must have more than one language that would carry the attribute 'official'. On the one hand, many different languages are used in some countries and on the other hand, a language can be spoken in many countries. English, French, Spanish, and Arabic are official languages of many nations. It is believed that more than half of the sovereign countries in the world use one of these four languages in the official communication. Besides this fact, all these languages are spoken by millions of other people worldwide.

Due to the greater movement of peoples, today we can use the term 'mutilingual megapolitism'. Not a small number of the biggest world and European cities are already multilingual. It is anticipated that in some cities the languages spoken by minorities can become languages spoken by majority, spreading out of their territorial borders. Mackey states that according to the number of people speaking Puerto Rican the biggest Puerto Rican city is not in Puerto Rico, but in New York. This issue reveals the necessity of establishing and creating multilingual education or, as Mackey puts it, many countries face growing cosmopolitan population in schools.[12]

For many countries in the world multicultural education is a subject of critical thinking. Those countries try to include in their constitutions and educational law the basic ideas about the multicultural education based on United Nation's and UNESCO's official documents.

There are many different modalities for achieving equality and multiculturalism in education, just as the many distinctive cultures, of numerous ethnical groups and countries. Here, only some of them would be mentioned: education in native language, from primary to university education; other educational activities in

native language, bilingual educational work (bilingualism); special programming systems for language and literature, history, geography, music; special programming systems for culture and history of minorities' ancestors; language in social environment; multicultural education based on press, media, radio, television, internet, publishing.

According to Verne, multicultural education presents educational program which does not concern only certain minorities, but it also refers to the social groups as a whole, no matter big or small. It refers to every social group which has distinctive culture and to the disparate relations and attitudes that a group develops toward other peoples' cultures.[14]

With the considerable growth of linguistic disparities, due to the liberation of many countries and peoples and the migration in the second half of the 20th century, the issue of education in native language, regional or some of the world languages was raised.

Concerning this, we should be aware that not a single nation has an absolute monopoly over the others. According to some data, the English language is used in 63 countries, French in 30, Spanish in 29, and Arabic in 27 countries. Some of the Western authors who study education in native language, point out that a serious problem may appear for some of the poorest nations in the world if they are about to imply education strictly in their native language. Many nations in the world are faced with this uncomfortable dilemma. It is a fact that neglecting the native language can result in a loss of cultural marks, but at the same time, confining only to a native language and neglecting the world languages inevitably leads to isolation, and can't be of any interest for the nation. Therefore, even in primary education learning other regional or foreign world language, whenever possible, is very useful. It is well known that in the developed western European countries the English language is spoken as first foreign language.

Bilingualism and bicultural education, as forms of multiculturalism in education unite the two functions of education: on one side, preserving of minorities' identity by adoption of their mother language and culture, and on the other side, efficient adoption of majority's language and culture by integration of minorities in economic and social life in a community. Some authors think that restrictions on the values of the bilingual education bring certain difficulties and slow down adoption of a native language. Others claim that bilingualism contributes only in the multicultural education of certain students who belong to a minority group, or possibly, for children from ethnically mixed marriages. The later authors find multicultural education rarely useful for students who belong to a majority group.

However, there is neither well defined point how multicultural groups should work, nor how far multiculturalism should go considering the positive acceptance of varieties in a community. Some authors suggest different models considering the multicultural education in the United States and Europe. Different attitudes towards multiculturalism in Europe and the USA arise from various conditions and situations of minorities. Along with these distinctions go the disparities in educational policy and attitudes towards multicultural education, values, needs, operationalization, etc.

Schools should play an important role in encouraging multiculturalism, especially multinational schools, because they are concrete educational institutions where children are taught proper behaviour. At the moment, in most countries, multicultural schooling is something that is allusion-like; however there are also countries in which it is a reality. So, in California every sixth child is born outside the borders of the USA and

two thirds of Californian students at home speak a language other than English. One third of children in Serbia at home speak a language other than Serbian.[2]

In terms of student population in the future, schools in Europe and the world will become multinational. The question here is whether schools will support multinational development, or they will increase the problems which exist and will arise as a result from the multicultural regime.

Teachers in California have already expressed their opinions. The schools must turn the different ethnical varieties into educational advantage. Children and teachers can be used as living beings resources for attaining geographical, linguistic, and historical consciousness that maintains many cultures. Schools can develop a wealth of languages being multilingual centers of various national specialties, having diverse contents of libraries, encouraging games during the breaks at school, supporting interschool athletic programs, and presenting different styles of clothing.

This is what should be. But, are those principles currently practiced in the world? The most developed form of education that encourages multiculturalism is exercised in the USA. The present form of this kind of education was built through four stages. The first phase is conducting short courses for ethnic minorities with curriculum about the minorities' origin. In the second stage the courses deal with broader issues concerning ethnic groups. The third phase is the development of programs that go beyond the focus on ethnic issues. In the fourth stage the schools begin to organize workshops and teaching materials that are more than just an ethnic teaching. This phenomenon appeared under the conclusion that ethnic groups suffer difficult situations, similar to those of other minor social groups (people with special needs, religious groups, etc.).

There are two familiar models of multinational (multicultural) education in Europe. One model is the European School, which issues the European diploma, and its work focuses on Europe as a whole, not upon a single nation. The other model is the so called Foyer Model used in Brussels, which is dedicated to children who are migrants and refugees.

Prentice Baptist and his colleague Karen Hues are proponents of multinational education. According to them, this kind of education should represent the following objectives:

- recognition and acceptance of cultural diversity;
- enhancing the understanding of unique cultural and ethnic heritage;
- promotion of an open program concerning culture which is accessible in all areas;
- adoption of attitudes, skills, and knowledge for better cooperation, work, and functioning with different cultures;
- reduction of racism and discrimination in every layer and area in the organization of a society.

Baptist considers that people and groups go through three-leveled programs for multinational education. Those levels are parallel with the historical phases of development in the American education. Karen Hues developed a program for preschool institutions in Houston in which the young children go through different multicultural experiences starting with celebrating ethnical celebrations and playing ethnic games. After this phase, the children are exposed to various cultural sources and materials which highlight multinationality. In this way they gain experiences which enable them to express sense of power and positive group identity. Part of this procedure includes materials about prejudice and bias and children learn how to oppose such phenomena. They learn that the cultural diversity is advantage and all the people should appreciate it.

Encouraging multiculturalism in schools can be stimulated also by special programs. Such programs are "Hands

Across the Campus" in Los Angeles directed towards humane access to culture. Through the program the students can gain knowledge for their origin, they can understand and learn the role of various cultural, ethnic, racial, and other groups, etc. The program is realized through a variety of methods: press, publishing newspapers, encouraging panel discussions, oral reports, dramatizations, role playing, and so on.

In the Bay area (San Francisco) a program named DARE is developed and its task is facilitation of communication among different ethnic groups, questioning stereotypes, religions, and nations.

The areas that are under a great ethnic tension adopt a program called "Blue and Red Ribbon". The program's task is to create stronger sense of unity in the schools and founding students' managing team for crisis, which will act only as prevention or destroying racial and ethnic arguments.

Taking into consideration the delicacy of the multicultural question education, it is still worked on models and methods for achieving optimal measurement among the general, separate and individual subject maters which are firstly local, national and regional and later continental and world-wide. Some authors represent the opinion that if the 'educational ideal' means formation of new citizen that would live in multicultural society, than 'additional' programs for education of children based on interculturalism and multiculturalism must be created. The subject matters of the 'additional' programs should be incorporated in every general educational subject. This is in accordance with the recommendations for 'European Dimensions of Education' i.e. it should not be realized as a separate subject, but as a principle in every teaching discipline.

The author M. Bennett suggests development of a well developed model of intercultural intuition through programs and activities in schools. We have to understand, he says, why people behave in an "unusual way" and which are the ways that lead to ethnocentrism and ethno relativism.[4]

An argumentative program designed to function well in schools, incorporated in different subjects and activities should make students aware of cultural diversity and prompt their understanding that every culture has local and international patterns-stereotypes for distinguishing people.

A critical element in the development of intercultural learning is not intended as individual knowledge of other cultures, but as reaching a stage up in the process of the cultural learning, communication and interpersonal relations.

Acceptance of these discrepancies results in a negation of "uncultural" and "unethical" rejection. With the establishment of intercultural differences we can clearly see international and intercultural similarities. Our similarities allow us to find a common standpoint. For instance, when a great number of Americans started to travel to Russia many of them realised that the former enemies 'resemble themselves'.

Experiencing cultural differences both as a kind of perception or expression help in overcoming segregation and positively influence integration in the ethnicity and group.

For successful realization and complete removal of internal or separatistic access toward culture and education, it is necessary for all the citizens to be able to live together in a common homeland. Besides the educational system and the social culture, the means of mass communication should present much more subject matter and languages concerning all national and linguistic minority groups, in the overall social environment, in order to develop continuously the Balkan, European and world dimensions of multicultural education. Solving the general, special and individual issues about curricula and textbooks in schools'

organization of work, really, is not and should not be a universal recipe. Therefore, it should be creatively researched until achieving optimal results, and at the same time continually criticizing and naming every single method on the subject that was proven inadequate.

3. Conclusion

In the context of this elaboration on the topic multiculturalism as an important feature of contemporary education, I assume that the following opinions might be summed up:

- Great number of countries in the world have become multicultural, and in future their number is about to rise.
- Every culture has its own specific characteristics which should be respected as such
- Multiculturalism is potential treasure for every society
- Multiculturalism is not manifested only as a feature of a community, but also at individual level
- In the center of multicultural education must be a person whose basic personal characteristics are: broad intellectual views developed and realized potentials, autonomy, tolerance, liberty, ability to criticize, and democratic orientation.
- Multiculturalism is not achieved only in schools, but also in family upbringing, by powerful and influential means, mass-media, books, movies and a complete social environment.
- The purpose of multicultural education should be a person with broad views and broad multicultural orientation, someone who can give meaning to individual national and cultural identity, and someone who will appreciate other peoples' cultural varieties and their achievements.
- Multiculturalism, linguistic and cultural pluralism, and multicultural education are important features of the new millennium everywhere in the world. They represent humanity's perspective for future life. This reality and civilizational progress have many followers among the civilized, educated, and humane people.

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WORD-FORMATION IN THE CONTEXT OF MULTI-DISCIPLINARY COGNITIVE PARADIGM

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Abstract. Traditional structure-oriented analysis of derivatives does not comply with the requirements of the new cognitive paradigm of linguistic knowledge, which incorporates knowledge gained within different sciences. Word-formation serves the explication of human cognitive potential, which originates from linguistic personality's individual and collective experience.

The analysis of *-er, -ee, -ant / -ent* and *-ist* revealed that the considered affixes which are characterized by close semantic links can objectify cognitive structures with similar meanings although the derivatives with these suffixes are characterized by a wide degree of polysemy. Thus, any concrete derivational mechanism objectifies the act of thought production in a verbal-sign form. Specificity and regularity of major operations with knowledge structures in mental space of a linguistic personality are represented in the basic derivational mechanisms which take place in a lexico-semantic subsystem of this or that language.

The results of this research indicate the inseparable connection of derivational processes with the idea of a language as a mental phenomenon, focusing on organizing, processing and transferring information. Cognitive word-formation analysis of derivatives can represent the basis for our knowledge organization at the junction of «language» and «thought».

Keywords: word-formation, cognitive paradigm, derivatives, cognition, conceptual integrity

During the last decades the study of multi-aspect correlations between language and thinking has intensified new trends and received a lot of attention of different specialists. The existence of close ties between human thinking and language / speech was known a long time ago. Language has remained the brightest identifying characteristic of ethnos at all times and for this reason ethnic groups are often called *lingua-cultural* communities. In the 6th century BC Pythagoras, a philosopher from Ancient Greece, believed that if we want to know morals and manners of some ethnic communities, we should learn their language.

Since the end of the previous century within the framework of the scientific paradigm change, humanitarian (and, in particular, linguistic) knowledge has experienced the shift from a dominating system-structural and static paradigm to the anthropocentric, discourse, cognitive and dynamic oriented one. At this updated level of scientific interests new sciences and their branches, new interdisciplinary relations appear: ethnopsychology, psycholinguistics, cognitive psychology, sociolinguistics, cognitive linguistics and its various directions, ethno linguistics, onto linguistics, etc. The interpenetration of different disciplines (such as linguistics, philosophy, psychology, culture study) and the tendency to methodological pluralism can be viewed as the major characteristics of the linguistic science at the end of the 20th and the beginning of the 21st century. As early as in the middle of the 19th century Friedrich Engels predicted that the most outstanding scientific discoveries would take place at the junction of sciences.

Thus, quite naturally there appears an opinion that the role of a language in a human society is to serve "cognition" which is understood both as scientific and everyday knowledge of the world realized in the processes of its conceptualization and categorization. Consequently, the basis of cognitive approach to the analysis of language forms consists in correlating them with various knowledge formats, which objectify the given forms. We share the opinion according to which, the importance of language structures is in

their ability to realize both vast structures of knowledge and their fragments (frames, scripts, concepts and categories of various levels, slots and terminals of frame structures), in the most accessible forms of verbal statements, which can be thoroughly examined from various cognitive views [2].

It is known that the language word stock is enriched, basically, in two ways: by word-formation (by means of units of all language levels - phonetic, morphemic, lexico-semantic and syntactic) and by loaning. Sometimes word making process incorporates various ways simultaneously. Such phenomena are referred to as complex ways of nomination. The above-mentioned ways can be referred to as «nuclear» word-stock enrichment ways, besides; there also exist "peripheral" ones: creation of neologisms, lexicalization, phraseologization / dephraseologization, etc.

So far cognitive linguistics has been intensively exploited while examining the questions of grammar, semantics, syntax and pragmatics. As for word-formation, it has not so widely been made use of yet, although word-formation processes are connected with all language levels: morphology, phonology, syntax, vocabulary. The recent research shows that word-formation as well as other linguistic phenomena reflects the knowledge and experience of the cultural life of both an individual and community and contributes to the formation of the linguistic picture of the world. Within the cognitive paradigm derivation in its broad sense allows to consider a lot of language processes from the positions of "the human factor" and linguistic personality's "cognitive activity" (perception, use, storage and production of information). This process becomes even more justified if we take into consideration the interdisciplinary character of modern science.

The traditional structure-oriented analysis of word-formation structures does not any longer comply with the requirements of a new human-oriented approach, which represents word-formation within the limits of a triad «thinking - language - culture», whose components are interconnected and interdependent, due to the cognizing activity of a linguistic personality possessing linguistic consciousness. Word-formation serves the explication of human cognitive experience, expanding their linguistic consciousness. The notion of language consciousness is narrower than cognitive consciousness. Word-formation activity takes part in the redistribution of language consciousness units and cognitive consciousness ones, not only verbalizing nonverbal elements of the cognitive semantic space, but also transforming and generalizing cognitions of a verbal level [1].

Even in ancient philosophy we can trace the roots of cognitive nature of derivational processes. Philosophers Plato, Heraclitus and others, while reasoning about "logos" and "onoma", believed that a word must be created and made use of in a proper way; otherwise the order in a society can be broken**.** A new word appears not just all of a sudden, but it reflects the multi-aspect correlation between the objects of the reality and a language sign. This understanding gives rise to the belief, that cognitive human activity is not confined just to the use of already existing lexical units, but also includes the ability to form new ones, which can be regarded as an inseparable part of world cognition. Moreover it is easier to trace some cognitive processes in a new derivative than in a unit of a well-established vocabulary. A derivative describes its reference object more vividly than a non-derivative word.

In modern linguistics various classes of words are studied not «for practical purposes (that is, to provide us with a tool of description), but also in an attempt to explain how it is that speakers 'know' how to build new words and how to combine words into grammatical

sentences. In other words, many linguists think that these word classes have psychological reality» [3].

Within the framework of the new anthropocentric paradigm a person is treated as an active creator of a language, and new words represent the result of this creative activity. Word-production is a multi-aspect process which is aimed at filling in the gaps which appear due to different reasons:

- appearance of new cognitions (often connected with the science and technology development and term formation needs) *(autostereographics, blogosphere),*
- economy and unification of language means (abbreviation, word-compounding, conversion, blending, contamination, borrowings, etc.),
- emotional expression (borrowings and occasional words),
- language fashion (borrowings),
- speech inaccurateness.

All these reasons stimulate the creating of new words including the process of speech and thought production activity. While creating a new word, the speaker spontaneously refers it to some definite part of speech, uses it in a required grammar form, correlating it with surrounding words. This can support our hypothesis that specificity and regularity of operations with knowledge structures in mental space of a linguistic personality are represented in the basic derivational mechanisms which take place in a lexico-semantic subsystem of any language.

Any concrete derivational mechanism objectifies the act of thought production in a verbal-sign form, representing it in the form of binary structure whose elements are connected by predicative relations. Within the word morphemic structure a root can be considered as a theme, and an affix - as a rheme. The similar relations can be found within the derivationally determined lexeme meaning, where typical word-formation meaning is a theme, and individual word-formation meaning represents a rheme.

Semantics of a root morpheme represents some cognitive background [4], which is specified and structured by means of derivational affixes. It is important, that semantics of affixes also represents a certain component of the linguistic personality conceptual sphere, but it is completely different from the root semantics. From the cognitive point of view a root morpheme should be treated as a *macro-verbalizer* of conceptual information, making the content of this or that fragment of a linguistic personality conceptual sphere. Therefore in this case it is possible to speak about the developing of predicative, semi-predicative, etc. relations among certain elements of sense, concepts and conceptual spheres, and only then these relations become explicit in a discourse by language means.

We have analyzed a number of suffixal derivatives (nouns and adjectives), including the following word-formation suffixes *-er,-ee,-ant /-ent* and *-ist*, which are characterized by close semantic links. We'll consider possible variants of classification of the derivatives, containing the above-mentioned suffixes. These lexemes are attributed various semantic classifications, which can be represented as a set of categorical elements of the meaning (semes).

The formants under analysis are combined with verbal, nominative and (much less often) adjectival stems:

-er - stem type V, less often N;
-ee -stem type V, less often N;
-ist – stem type N, less often Adj.;
-ant /-ent – stem type V.

It is possible to classify the corpus of the analyzed derivatives (more than 2600 units) on the basis of general categorical elements of both lexical and grammatical meanings. These meanings were revealed while analyzing their definitions in dictionaries (5, 6, 7, 8).

The results of the classification are presented in tables 1-4.

Table 1

Suffix–*er*

General categorical seme	Examples of derivatives
Agent	*Adviser, thinker, walker, writer*
Instrument	*Cutter, dryer, mower, opener, pager, printer*
Stimulus	*Pleaser, killer, page-turner*
Experiencer	*Hearer, listener*
Patient	*Fryer, keeper, looker, sinker, loaner*
Location	*Diner*
Measure	*Fiver*

Table 2

Suffix – *ee*

(Here it is necessary to mention that the major part of the selected units – more than 70 % - are represented by specialized vocabulary)

General categorical seme	Examples of derivatives
Patient	*Employee, deportee, nominee*
Agent	*Attendee, devotee, escapee, standee*
Object	*Addressee, alienee, dedicatee, offeree*
Absence	*Amputee*

Table 3

Suffixes –ant / -ent

General categorical seme	Examples of derivatives
Agent	*Accountant, claimant, servant*
Instrument	*Adulterant, evacuant, irritant*
Experiencer	*Dependent, detestant, discernant*
Patient	*Confidant, insurant, descendant*

Table 4

Suffix –*ist*

General categorical seme	Examples of derivatives
Denominal person nouns	*Guitarist, Marxist*
Deadjectival person nouns	*Purist, fatalist*

As the above-mentioned classifications show, the analyzed derivatives demonstrate a wide degree of polysemy, but at the same time it is possible to single out some cases in which general categorical elements of meaning, typical of different derivatives, coincide. It is obvious, for example, that by means of suffix *-ee*, the most frequent and, hence, productive model is: formation of nouns in the semantic case of *patient* (e.g. nominee - a person who is nominated for some office or duty; a confidant – a person entrusted with knowledge of one's private affairs (orig. esp. one's love affairs) or thoughts). The rest of the affixes from this classification are used to form the nouns with *agent* - semantics, or represent the objects, closely connected with the subjects of the actions and / or processes (tools, stimulus, etc.). At the same time, the significant number of derivatives in *-ee* are labeled with *agent* - semantics (e.g. escapee – a person who has escaped;

retiree - a person who has retired), and many nouns in *-er, -ant / -ent and -ist* show the ability to form both the lexemes acting in a case of a *patient*, and in other, "object-oriented", passive semantic roles (for example, insurant – the person to whom an insurance policy is issued). Thus, we can observe here a kind of a semantic paradox which is possible to resolve only on conditions that the considered affixes objectify the cognitive structures with similar meanings. We have tried to interpret the derivational schemes under study in terms of cognitive structures, represented by them.

First of all it is worth mentioning, that the affixes under investigation are used for the formation of nouns from the stems of other parts of speech, mainly from verb stems. Thus, we can see the following transformation of grammatical semantics of an initial basis: action → subject. It is really so prima facie, as the suffixes *-ee, -er, -ant /-ent and -ist* form nouns. But if we turn to the hypothesis of conceptual blending in relation to the derivational mechanisms under study, we observe the interaction of two concepts of a high degree of abstraction - concepts ACTION and OBJECT in the semantics of *-ee, -er, -ant /-ent* and *–ist* nouns.

The analysis shows, that while interacting the content of one conceptual structure does not supplant the content of the concept-receiver. This fact proves to be true according to the results of the definition analysis of the noun-derivatives under study. Thus, there is an explicitly objectified ACTION seme in the semantics of 94% derivatives. Consequently, ACTION semantics is not completely transformed to the SUBJECT semantics. Let's consider the examples:

- *employee* – a person who works for another in return for wages [8];
- *escapee* – someone who has escaped [8];
- *opener* – 1) a person or thing that opens something, 2) a device for opening tins or bottles [8];
- *thriller* – an exciting story or film, especially one involving crime [8];
- *claimant* – a person who makes a claim, especially in law [8];
- *guitarist* – someone who plays a stringed musical instrument with his fingers or a plectrum [8];
- *purist* – a stickler for enforcing correctness, especially in language [8].

The interaction of the concepts ACTION and OBJECT results in the complex conceptual integrity in which concept OBJECT prevails, but the content of the concept-source ACTION is also traced.

Processes of structural and semantic derivation in language represent the reflection of conventional models of the interaction of a linguistic personality's conceptual sphere structures. The interaction of conceptual structures results in the form of a blending, which integrates two (for this research) or more conceptual fragments. Separate word-formation elements can objectify various areas of the resultant-concept, which causes semantic distinctions of lexemes-derivatives while the content unification of a resultant-concept makes it possible to unite the lexemes formed by different word-formation models.

A new derivative represents a complex structural-semantic unit, each component of which represents some concept. Consequently, word derivational structure can help to reveal and describe connections and relations between concepts, which originate from linguistic personality's individual and collective experience.

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THE GAME - A REAL CHANCE OF MODERN EDUCATION

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Abstract: The purpose of the present paper is to show the need and the potential of play activities in the elementary grades so that children quickly and easily overcome fitness problems in the transition from pre-school to the school system of education, and to at least partially alleviate the existing problem of discontinuity.

The sudden transition from the system of playing activities in the system of learning activities, based on the implementation of tasks under strict guidelines, can hardly match the current developmental abilities and needs of children. Therefore, various problems occur in the work of first-graders: it is difficult to attract his attention, he finds it difficult to work and school homework, forgets what he just heard, does not concentrate long enough, soon he gets bored in class activities, fidget, real careless mistakes, constantly repeating the same mistakes.

At the very beginning of their education, which in some ways represents a transitional period, a part of learning activities should be organized through the game, in order to overcome resistance to school.

To make it faster and easier to overcome adaptive problems of children in the school environment and learning today in educational theory and practice, we try to find a solution for the organization of educational and play activities in the learning process, at least when it comes to the junior grade.

Keywords: game, implementation, playful activity entered, educational activity

1. Introduction

Studies of games and play activities challenge the large number of scientists, researchers and scholars. Its impact on the child's development has been studied from various aspects. In recent pedagogical and psychological literature, there is a rich fund of established scientific theories providing an explanation of the origin, essence and importance of games and play activities. There is no theory of games and play activities studied them in full and complementarily, which points to a complex structure of play activities that still retains the characteristics of its development. It is not given once and for all, but rather its essence is still a major challenge for modern scholars and researchers.

The purpose of this paper is not to rehash the arguments and confirmation of the values of the educational children's games, which can be found in a vast majority of foreign and domestic literature [5, 10, 11, 15, 18, 25], but one that we think is a significant possibility of using games in educational work with children in the elementary grades, and how to help your child through the game more quickly and more easily overcome the problems of adaptation to the school environment and learning. The well known is the observation that the possibilities and needs of preschool and school age are different and that in primary school increased attention given to the educational process. Unlike kindergarten where the children are organized according to focus, by choice of children, and the combined activities with the possibility of spatial and temporal flexibility in their organization, in the school plan and organize learning activities, time and content binding for all children, the function of acquiring knowledge, skills and habits students, their professional guidance.

Our intention is not to point out that children learn through play is unique or that the curriculum is based on the game's best and unique approach that supports early learning. In contrast, the goal is focused on how to set up the game as an opportunity for the realization of different activities with different models of

action, interaction and communication between entities.

In educational theory was an attempt to challenge the educational value children's games and emphasize instruction as the only form of systematic learning. Today, in modern educational concepts, game education activity receives its meaning.

Play and play activities provide the opportunity for methodological compatibility of both subsystems: kindergarten and primary education, it is appropriate for children's developmental abilities and needs (in relation to the way of learning and development), offers opportunities for creative expression and teacher educators, as well as freedom in integrating the various program areas and aspects of development. In his methodical concept of playful activity should provide an adequate transition for students to gain experience of the games to the systematic acquisition of knowledge. It does not represent a finished form that is given once and for all, to be applied to many generations of students and will be universal for all program areas and aspects of development.

Play helps children develop and direct, indirect upbringing and education, and the development potential of open space for new games. Therefore, one cannot ignore the importance of the game in the organization of educational work with children in both preschool and junior primary school. Comprehensive review of preparations, organization and evaluation of children's games and the role of educators and teachers in it, supports the educational character of the game.

During the seventies, French authors Lechat, Vincelet and Kroy have tried to challenge the educational value of children's play and its educational character, pointing to its limited capabilities.[10] The game was seen as a leisure and pleasure, not the development of children's abilities. When the game gain the knowledge, skills and habits, the children follow the rules that must be done to comply with and without can express their creative potential, these authors do not consider more game in the true sense of the word. They find that the game is basically different from school activities because you do not leave anything except the said pleasure, while the children's knowledge of the end results of school activities and exercise.

Another implicit theory that arises from such a point of view that does not play and learning go hand in hand. The basis of this approach is the implicit belief that learning is a painful and arduous activity of the children should be spared as they are not "ripe" for the school.

The aforementioned objections apply games in educational work with preschool children are obviously one-sided and unacceptable from the point of view of modern conceptions of upbringing and education, according to Jan Comenius has paid great attention to learning through play. In the didactics [12] Jan Comenius in terms of learning through play stands out: "... to learn the easy way so that neither the teacher nor the students do not feel any difficulties, aversion, but to them it is pleasure."[12]

The game released school-fear, fear of testing and the assessment. The game is free, joyful, no stiffness and nervousness. The game creates interest, activates the child and struggling to master the knowledge and skills required to play. Activity in the game and encourage elements of competition and evaluation activities of other team members, as well as its own evaluation of the game. Creating favorable conditions for play: space, resources, with an atmosphere, will give students joy of discovering the expression of personal needs and interests, which is certainly important at the beginning of their education. One of the aims of enabling secure start of children, "Do all children have access to high - quality game and its educational opportunities for learning, in order to facilitate the progress

of children for early learning in school."[22]

What for us is important to play activities through the curriculum to be an integral part of the teaching process. This is the first step of the practical implementation of game-playing activities in the teaching process.

2. Organized learning through play

Numerous scientific and practical researches on the importance and role play mainly related to the pre-school period. Increasingly felt the need for its use and early school period, but in terms differently, terms of teaching, learning, acquisition of knowledge, skills and abilities, and so on.

In our educational system, there is still a sudden interruption in the way of encouraging and motivating children in the way of knowledge transfer, diverting the course of development of children in which the child has previously been directed, all of which makes its adaptation in the other subsystem (from pre-school to primary). This is especially noticeable in the educational work with children in the year before and one after school age (between 6 to 8-and-me year). "The more you distort gradual transition from preschool to school age life. Which violates the blinder years build dynamic stereotype, this heavier, longer-lasting and less adequately to the body until yesterday preschool child adopt various new forms of activities and how they are organized".[1]

It is well known that preschool children learn through play, the game is their main activity. However, one should not ignore the fact that when children go to school and feel the need to play. Play helps children develop and direct, indirect upbringing and education, and the development potential of open space for new games. Therefore, one cannot ignore the importance of the game in the organization of educational work with children in both preschool and junior primary school.

At the very beginning of their education, which in some ways represents a transitional period, a part of learning activities should be organized through the game, in order to overcome resistance to school. The resistance is not aimed at teaching the contents of, but the ways and forms of their presentation.

Given the age characteristics of the six year old, (curiosity, the need for independence, expressed emotionality), and children's need to be constantly on the move, active, and research to investigate, decide and control of the situation at work will emphasize the importance of using games as teaching methods in the period of adaptation to school work and learning. Been particularly important that the child fully satisfy their need for play and cannot be allowed to stop it artificially, as this may lead to delays in the development and learning of control of attention, memory functioning and formation of symbolic operations.[1, 17, 4, 14] Teacher at the school especially at the beginning, you need to enter the spirit of the game and understands the habits that children bring from the nursery, and that is not always the best fit in the school code of conduct. If there is no play in the educational process, the enrollment of the child is widening the gap between preschool and school childhood and strong discontinuity in the education system.

Learning through play at primary school children helps overcome the discontinuity between pre-school and school education. Curriculum content can be covered through carefully selected and prepared play activities with the support, encouragement and guidance of adults and a good knowledge of age and physical and psychological characteristics of each child. Properly measured and designed children's activities adequately prepared conditions, the support and encouragement of adults, contribute to the fact that children freely, spontaneously and creatively express

themselves. Adults intervene in play only when the children want to play, or when the process requires. Support a child's intellectual excitement of the game, better concentration, focus on the goal and develop the ability to independently solve problems.[16]

The world professionals after many years still argue about the role and value of the game and its impact on teaching and learning. The choices for and against games in an educational context, producing arguments that position high in educational policy, research and practice. The game continued to receive serious treatment, and the confirmation that the modern research that provide a new theoretical framework and guidelines for the practice. The game is still in the sphere of interest of scholars and practitioners primarily for its ideal blend of theory and practice, as well as ensuring the quality of learning and teaching.

Bearing in mind that during the first cycle of education is a key transition from the concrete to the preoperative level of mental development of students, play activities should strive to leaving the sphere of practical activities and promoting those activities that are associated with the development of higher mental functions. Activities that require only routine engagement are slowly being replaced with play activities to stimulate engagement significant mental capacities of students. The famous psychologist Jean Piaget believed that play is a function of cognitive ability and cognitive activity as it has a great significance in the development of symbolic function "... to him by the same factors that determine the intellectual development and determine the progress of the game, it is a phenomenon that follows the development of intellectual function and reflects the main features of the individual stages of development of the intellect."[10]

Play activities allow children to be more motivated and more powerful in the learning process. Learning through the game more enjoyable modern child, but also a challenge every ambitious teacher. The changed attitude toward children and childhood necessitate the increased recognition of its development needs, interests and desires, and therefore the involvement of children in planning educational activities. They participate in the selection of topics and during their implementation. Karen. Williams in his article titled Involving Children in Curriculum Planning [23] indicates the effects of treating children as a source of planning educational facilities. According to her, most of the teachers would not want to create their own program in this way, but really worth at least a part of the program to be created in terms of the interests of children. When, in the process of joint planning of educational work with children (usually this refers to the preparation of the treatment of a topic), Williams puts the emphasis on the four questions posed to children: What do you want to know?; What all together we can find?; What materials are necessary?; What would you like to bring from home?. This concept, according to Williams, it gives great results. Children are increasingly more motivated and more engaged in the learning process, because it is based on their needs and interests.

Given that the game is always associated with children's internal needs, interests and preferences, in addition to good educational outcomes, improves satisfaction among students, and at the same time it facilitates, and rewards to motivate learning. Satisfaction is the source of happiness and motivation and all that is carried out spontaneously without the presence of any kind of coercion. Tasks, policies and objectives set out in the play activities students naturally accept them as their own for the sake of them for the rest serve to achieve the desired goal.

Since the game is much more flexible and better fits the needs and interests of children, it takes precedence over the school system work. It is a more

convenient and attractive way of learning for preschool children, but it can be successfully used in the teaching activities of the lower classes of primary school. This statement is to point out the need for the implementation of games and playing activities in the early school period. By its methodological concept of playful activity should offer students an adequate transition from the acquisition of game-playing experience to the systematic acquisition of knowledge.

A methodical concept play activity is important because it needs to be a structure methodological realization of play activities. What is very important is the way that will be understood and interpreted structure methodical c play activities. It is not a done that once forever date and will be applied to many generations of students and will be universal for all program areas and aspects of the development

3. Implementation of play activities in the early school period

In educational theory the authors have long emphasized the organization of learning activities through the game.[8, 13, 19] It involves a systematic evaluation of the implementation of games in the classroom.

Bearing in mind that playing and learning are complementary processes, or to one side of learning contribute to changes in behavior and enrichment experiences, and enriching play on the other side the child to new experiences which are later applied perfecting their acts, the question of the need for and importance of play activities at the beginning of education, as well as different;, modern and creative approach to the realization of the goals and tasks of different program areas. Application of games and play activities in the early school period tends to overcome the organization chart, the formalism and rigidity that characterize the traditional approach to teaching.

Considering the play activities as a specific methodical organization can be seen to its organization and implementation can successfully achieve the goals and objectives of intellectual, moral, aesthetic and physical education, and at the same time to create the basis for the primary socialization and proper socio-emotional development of children.

Realization of content teaching in Serbian language, mathematics, nature and society, art, music and physical education using play activities as a methodological concept in the first cycle of education aims to provide students an active position, teaching innovation, modernization of methodical access and release creative energy themselves teachers .

The methodological concept offers a completely different treatment of the role of teachers, the respect of his professional competence, professional capabilities, creativity and inventiveness. The teacher needs to create conditions in which "... provide a variety of playful activities and possibilities children to feel inspired and privileged at their own game".[24] Playful activity itself does not offer a finished product that is to be achieved in the classroom. Her methodical meaning is that the teacher has the freedom of its overall design, the choice of content, didactic and methodical design, to the realization that should lead to a specific goal.

Susan Isaac (1885-1948) implemented numerous system of observation children aged two to nine years. The game is explained as "central to the curriculum that children able to solve problems and develop skills in reading and writing and arithmetic."[24] Particularly stresses the value of spontaneous, imaginative and manipulative games. The role of the teacher according to her lies in the observation and identification of children's needs and interests.

A teacher’s interest for creative teaching stems from his didactic and

methodological quality abilities, needs, interests and abilities of students and teaching facilities.

In recent literature there is indeed a wide range of didactic and methodical and offer solutions on the implementation of the game and playing activities, but a good teacher input is offered to choose from, combine, create, and that the maximum in their professional practice.

Play activities as a methodological concept in the first cycle education seeks to bring issues concerning the Serbian language, mathematics, science, music, arts and physical education to all students.

Serbian language curriculum in the first cycle of education bears the brunt primarily for initial literacy needs of children. It should therefore be to offer a methodical approach which will allow "..... with the child quietly but systematically to conduct those activities that will enable him to painlessly and naturally adopt the principle of the alphabet, converting voice that listens with a letter that looks and vice versa. This means that the activities of the child (in the form of storytelling, conversation, shared reading of picture books and stories, the preclusion of children around the notation and properties of written text, the importance of letters and letter correspondence and votes as well as the meaning of the story) during childhood, but before we go to school will develop at his readiness for rapid adoption of the coding and decoding as well as for fast almost indiscernible transition from illiteracy to literacy...".[3] Motor exercises, voice analysis of words, developing a sense of basic speech units are only part of the content of the curriculum, which can be realized in the first year, the different variants of mobile or didactic games.[13]

The content of methodological articulation of Serbian language special attention should be given to the establishment and initial literacy performance about letters. Many studies show that students want to know the source, origin and significance of all the things they learn. Hence the desire to get to the essence, the origin and significance of letters. Such a possibility provides a model of learning to read and write through the use of picture-word as an inductive method.[9] This model aims to provide such a methodical exploring and learning the alphabet with each letter of the need to offer a corresponding picture. Each image provides opportunities for students together with teachers to create a story that will give the required letter to the significance and inductive methods, students will create a concept and an idea of the specific letter.

Mathematics as a subject, despite its exactness can practically be applied through methodical concept of playful activities with clearly indicated its purpose. Play activities can be implemented in different types of the class, even in the class of renewal, because "... in the direction of learning skills - update can be standardized and classified according workbooks much more than the teacher." A good teacher in teaching (e.g. in the preparation of tests), can reduce the boredom of students using the technique of concentration and motivation".[20]

Contemporary approaches to the implementation of mathematics students tend to learn to use a method of writing for addition and subtraction of numbers".[7] This approach, is the most expended calculator use in teaching since in the earliest age.

The subject world around us is very near in a good connection between the immediate environment, daily life, nature, and schools. In the process of acquiring knowledge, skills and abilities with students often, the procedures of observation and description of all what is seen and experienced. In addition to observing learning about the environment is particularly important way to come into contact with the environment and to act on it. Be sure that all interaction is unavoidable active position students who primarily can be enabled through play

activities. In this sense it is said: "The game is the role of creative, practical, and experimental techniques educational." Studies show that plays the role as a form of physical modeling helps students visualize understand abstract scientific concepts. Understanding comes not only through the participation of high level of participation, but also through exposure to ideas, discussions, collaboration with other students".[21]

Early school age have caused physical changes to weight and height of children, students and they need more than an activity in addition to cognitive and affective development will provide adequate physical development. "It serves as an engine of cognitive and affective development of young children, and is also important for the development of small and large motor skills."[6]

4. Conclusion

Methodical concepts of playful activities found in the core of the educational process are significant drivers of active place for students. The value of methodical concept of play activities consists in the fact that on the one hand, they serve as a means for achieving educational outcomes and on the other side as the form through which students advancing its knowledge, skills and abilities. Through this approach playful activity is increasingly becoming a life practice.

Properly designed and organized with proper role of the teacher in it, the game achieves its educational function. In addition, learning through play in the elementary grades is possible for children to quickly and easily overcome fitness problems in the transition from pre-school to the school system of education, and to at least partially alleviate the existing problem of discontinuity. Teachers try to incorporate the game to a greater extent in teaching first grade and development of didactic and methodological guidelines, concretize the role of the teacher in the planning and organization of the game and formulate ways of evaluating its effects. In this way, the gap between traditional and modern teaching can be overcome through concept play activities that are provided on one side of intellectual development, social skills, emotional stability and physical maturity, and on the other side by providing the freedom of students to their active position that is not the end of the anarchic , already has a structure that is necessary in a systematic process of acquiring knowledge and skills, and that is education.

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ON BEAUTY AND THE BEAUTIFUL IN AESTHETIC EDUCATION

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Abstract: We titled our work "On Beauty and the Beautiful in Aesthetic Education" and we analyzed the category of beautiful in function of better understanding the issues of aesthetic education.

The basic point was the fact that the determination of the term beautiful is different in both time aspect and space aspect. Also, the authors involved in this matter have got different understanding on the issue of beautiful, on its essence, on its role in human development and on the development of the aesthetics and the aesthetic education.

Therefore, within our work, there is an attempt to differ the approaches towards the category of beautiful, to comment on it, to compare it and finally to give our approach.

Keywords: *Aesthetic education, aesthetics, pedagogy, philosophy, theories of beautiful.*

1. Introduction

Beauty, or *the beautiful*, is a basic category of aesthetics and aesthetic education. Accordingly, no theoretical work on aesthetic education is complete unless it includes a definition of the category of *beauty*, or *the beautiful*.

On the surface, providing a definition of the essence of *beauty* seems rather simple, even insignificant, as everybody tends to think they know what beautiful actually is, and in turn, what is not or what is ugly. As a result, providing a thorough definition of this issue is considered to be of no use.

However, *the beautiful* has been defined differently from the aspect of time and space, and it has been subject to the conceptions held by different authors dealing with this category.

2. Beautiful as universal theme in aesthetics

Claiming that *the beautiful* is a universal theme in aesthetics, Nadežda Čačinovič-Puhovski writes, "it is contradictory in nature to discuss aesthetics with the conviction that *the beautiful* is not one of its universal themes".[9]

The author further elaborates on this issue and points out to the fact that *the beautiful*, if considered outside of the context of philosophy, is regarded as an attribute; whereas, philosophers, instead of trying to define what is considered beautiful, have attempted to provide a theory of *beauty*. The focus on what is beautiful has shifted to the essence of *beauty* itself. The essence of *beauty* has been defined by philosophers in various ways and has become the main concern of aestheticians. (Ibid)

Even Plato discussed the difficulties in and the importance of distinguishing between *beauty* and *particular beautiful things*. According to Plato, *the beautiful* and *the good* are connected; however, *the beautiful* must be defined first. Therefore, according to ancient conceptions of aesthetics, *the beautiful* and *the good* are inextricably connected: *the aesthetic* is moral.

In his AESTHETICS AND THE GENERAL *Theory of Art*, Dessoir argues whether or not beauty and art represent identical concepts. In an attempt to provide an answer, he states "art is neither the product of imitation of beauty, nor is it exclusively determined by beauty".[1]

Further on, the author argues that aesthetic values of art are presented

through *the beautiful*, as well as through *the tragic*, *the simple*, *the sublime*, *the elegant.*[7]

3. What is beauty?

However, if the work of art embodies *beauty*, and not some other value, then what is *beauty* characterized with?

Formalist aestheticians reduce *beauty* to "clarity and easy comprehension of certain relations." The experience of *beauty* will occur if we are able to discern the *unity* within the *multiplicity*; since *beauty* represents merely a part of reality, it is subordinate to reality.[1]

If *multiplicity* is the sum of individual aspects of the senses: *color*, *sound*, *words*, *light*; whereas, *unity* corresponds to: *reason*, *wholeness*; then, the experience of *beauty* is a process between the senses and reason; *beauty* is a middle ground between the senses and reason.

In the history of aesthetics, authors have provided numerous definitions of the concept of *beauty*. In an attempt to classify the definitions, Petrovik has defined *beauty* as a 'synthesis,' as well as a 'harmony of opposites'.[7]

An analysis of the various theories of *beauty* reveals that, in general, all the different definitions deal with three distinct notions of *beauty*, as follows:

- *Beauty* in its wide meaning. This notion incorporates *moral beauty* as well, and combines aesthetics and ethics. It has its roots in ancient philosophy but extended well into the Middle Ages;
- *Beauty* in its meaning exclusive to aesthetics – in this regard, beauty mainly expresses aesthetic experience in terms of color, sound, thought, etc. This notion is the foundation of European culture; and
- *Beauty* in its aesthetic meaning but limited only to what can be perceived with the eyes (color and shape). It is worth noting that in aesthetics *the beautiful* is rarely viewed in this way.[6]

In general, contemporary aesthetics uses the second concept.

These three definitions do not preclude the existence of other, more general or specific, definitions of *beauty*. On the contrary, considered from a historical perspective, various authors have provided definitions which do not completely support the ones we have provided above.

Thus, in *Meaning of Meaning* the British philosophers Ogden and Richards list sixteen definitions of *the beautiful*. However, some of these definitions are fundamentally wrong. For instance, *the beautiful* is defined as "that which is an imitation of Nature," "that which is the work of a Genius," "that which heightens Vitality," etc. These statements possess few of the characteristics of a definition, and are in essence merely incomplete observations and dubious generalizations.[6]

The authors themselves consider only five of the sixteen definitions:

- Anything is beautiful – which possesses the simple quality of beauty;
- Anything is beautiful – which promotes a Specific emotion;
- Anything is beautiful – which has a specified Form;
- Anything is beautiful – which reveals (Truth, the Spirit of Nature, the Ideal, the Universal, the Typical);
- Anything is beautiful - which is an Expression. (Ibid)

A more exhaustive analysis of the given definitions reveals the imperfections of the classification in the sense that these statements cannot be regarded as thorough definitions, but as, in the words of Tatarkiewicz, mere framework which

could serve as the basis for new definitions.

In *The History of Beauty*, the renowned semiotician, aesthetician, and prosaist, Umberto Eco, explains that "beauty has never been absolute and immutable but has taken on different aspects depending on the historical period and the country: and this does not hold only for physical Beauty (of men, of women, of the landscape) but also for the Beauty of God, or the saints, or ideas". [2]

Beauty is among the three highest ideas: *the good*, *the beautiful* and *the true*.[2]

4. Theories of beautiful

The Ancient Greeks formulated *The General Theory of Beauty* according to which *beauty* consists in the proportions of the parts; more precisely in the proportions and the proper arrangement of the parts, or, still more precisely, in the size, quality and number of the parts and their interrelations.

This theory was referred to as *The Great Theory*. The name fits well considering that throughout the entire historical development of aesthetics and western culture no other theory has endured as long and has been as widely accepted as *The Great Theory*.

The Great Theory was developed by the Pythagoreans. The Pythagorean School defined *beauty* in terms of perfect structure, and structure was defined in terms of the proportions of the parts. At first, this theory was applied to music, and later to architecture, sculpture and the beauty of living beings. It includes both vision and hearing. *Harmony* and *symmetry* are the underlying principles of *The Great Theory of Beauty*.[8]

However, the theory of proportion has met with criticism since ancient times. For instance, Plotinus, in the age of late antiquity, developed a binary theory challenging *The Great Theory of Beauty*. Namely, according to *The Great Theory* beautiful is only that which consists of parts; whereas, the brightness, the stars and the gold do not consist of parts, but are nevertheless beautiful. Hence, his theory of beauty is based on *proportion* and *clarity* (*radiance*, *brilliance*, *light*).[8]

With regards to the concerns of aesthetics discussed by Plato, Grlić considers the relationship between *beauty* and *beautiful objects*, i.e. the relationship between *metaphysical beauty* and *concrete beauty*, a primary concern of aesthetics.[4]

In his works, Plato deals with the essence of *beauty*, i.e. the aspects that render a girl, a vase, an animal, or a tree, beautiful, as opposed to which things are beautiful. He emphasizes the fact that apart from beautiful objects, there are also beautiful thoughts, i.e. *beauty* itself.

On the grounds of this theory, philosophers in the Middle Ages dealing with the category of *beauty* included *clarity* in their theories, in addition to *proportion*.

It is worth noting that *The Great Theory of Beauty* was not completely rejected by philosophers in the period between the 3rd and the 15th century; on the contrary, the theory was extended to include *clarity* in addition to *proportion*, as a fundamental principle of this theory.

The Great Theory of Beauty was developed in the 5th century B.C. and survived until the 17th century A.D. This means that the theory existed for twenty-two centuries. However, throughout history, *The Great Theory* has gone through modifications, including new theses, additional concepts, limitations, etc.[8]

It is worth noting that *The Great Theory of Beauty* was further developed to include:

- The thesis of *the rational* and *the beautiful*;
- The quantitative nature of *beauty*;
- The metaphysical nature of *beauty*;
- Its objectivity; and
- Its high value.

Tatarkiewicz lists several theses which have been directly linked to *The Great Theory of Beauty*, as follows:

- True *beauty* is perceived through the mind, not only through the senses;
- The quantitative nature of *beauty*;
- The metaphysical theory, which was of idealistic nature and became theological. The proponents of this theory believe that "God is the reason for all that is beautiful" or that "God is eternal beauty;"
- The objective approach, which has its roots in the teachings of the Pythagoreans, Plato and Aristotle, and the underlying principle of which is that *beauty* is inherent to the objects and that, according to Plato, judgments of *beauty* have objective validity.
- *Beauty* is great goodness. In ancient philosophy, the beautiful is one of the basic human values: *the true*, *the good* and *the beautiful*.[6]

An analysis of the basic premises upon which this theory rests leads to the conclusion that the process of development of *The Great Theory of Beauty* has lasted for two millennia.

At first, *the beautiful* was connected to *the good*, an attitude characteristic of antiquity and the Middle Ages.

The sophists, aristotelians, stoics and humanists reduced this theory and dealt strictly with *the aesthetically beautiful*.

In the 18th century, the theory of beauty is narrowed down again, and *the sublime* is separated from *the beautiful*.[8]

The long development of the theory of *beauty* is characterized with a gradual shift from objective to subjective aesthetics.

Up until the 20th century, *beauty* was a concern of Kant, Hegel Schopenhauer, Nietzsche, Santayana, etc.

The schism between *natural beauty* and *art beauty* has been widely discussed. According to Hegel, *natural beauty* cannot be a major concern of aesthetic theory. Hegel believes that *the beautiful* is identical to *the valuable*. In this sense, the "artistically beautiful" is the same as the "artistically valuable."

Many authors believe that defining *beauty* should not be a concern of aesthetic theory.

Ivan Focht, in his theory of aesthetics, claims that "if the beautiful, in the narrow sense of the word, can be a concern of aesthetic theory, then, aesthetics cannot act as science of the beautiful".[3]

5. Conclusion

Criticism of the central position which *beauty* occupies in aesthetics is based on three premises:

- Successful art is not necessarily beautiful;
- There are many species of aesthetic value which cannot be reduced to *the beautiful*; and
- Aesthetics has to do with reason.

Experience has led us to believe that the consideration of a certain value entails consideration of the opposite of that value. In this sense, it is difficult to ascertain whether one can find *the non-beautiful – ugly* in all dimensions of *the beautiful*. It is undoubtedly true that, with regards to the creations of man, *the ugly* exists alongside *the beautiful*; however, how much of this is true for the beauties of nature is open to dispute.

It is different in terms of the *beauty* in the works of art of high artistic value whose subject is not beautiful. This refers to *the beautiful* in art, poetry, paintings, etc. In this sense, Nikolai Hartmann notes that a badly painted painting will not look beautiful; however, a well painted painting portraying an ugly subject could nevertheless be artistically beautiful.[5]

With regards to contemporary theories of *beauty*, Dzeparoski notes that in the 20th century, the focus on *beauty* has

shifted from the sphere of art to the sphere of everyday life, advertising and marketing.[8]

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DIDACTICAL - METHODICAL ASSUMPTIONS AND CONDITIONS FOR SUCCESSFUL SOLUTION OF ECOLOGICAL PROBLEMS AT PRESCHOOL INSTITUTIONS

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Abstract: The ecological crisis, arising as a result of the highest aspirations of mankind for the production of goods, is getting wider and wider. The significance of the problem and a real threat to the environment, leads us to conclude, that today more than ever before, there is a need to develop environmental awareness and culture from the earliest period of life. This means that contemporary environmental issues should have a significant place and role in the organization of educational work in kindergartens. The need to start with environmental education at the preschool level results from the psychophysical characteristics of child development, and the fact that this is a period when the foundations for future personality are being formed.

Taking into account the above listed requirements and findings, we intend to work on pointing out the importance of the environment studies in the course of institutional preschool education, and focus our attention on certain didactic-methodological assumptions and conditions, which should be respected, and to ensure the implementation of the environmental education in preschool period.

Keywords: ecological education, preschool, preschool period, the environment...

Introduction

The time in which we live is characterized by rapid scientific and technological, socio-economic and cultural changes. These changes have multiple effects on the environment, but also on the knowledge of a new individual and social need, which indicates the need for ongoing review and improvement of the quality and efficiency of the educational system as a whole, and thus pre-school education as a component part.

In a complex and universal system of environmental protection, environmental education has a very important role, which in the broadest sense is a process of "permanent acquisition of environmental knowledge, concepts and skills, while developing environmental awareness, culture, and behavior in the working environment in order to preserve, protect and, if possible, improve the future of the communities". [6] These requirements impose the need for Greening the process of education, and its essence is reflected in the introduction of ideas, concepts, principles and approaches at all levels and in all forms of educational work.

The preschool period is one of the most important periods in the development of personality and the results, that are achieved, depend on the success of the later stages of the educational work. It also means that the preschool period is an important period for learning about the environment, especially since "there is no age limit below at which children cannot be educated and taught the environmental issues". [2] Preschools are thus playing a very important role as an integral part of the educational system, which start educational activities with children from 3 years to school age, which leads us to the conclusion that the development of environmental awareness and environmentally friendly behavior requires that environmental education to become the goal of educational activities in them.

1. Developing the understanding of ecological education

In the second half of the 20th century, many ecological problems caused by the ecological crisis, which arose as a result of the highest aspirations of mankind for the production of goods, imposed the need for a reconsideration of the role of a man in the world around him. However, the awareness and knowledge of ecological issues are more recent achievements. On the contrary the pursuit of environmental protection has always existed. This statement causes us to reflect on the problem that can be found in the works of ancient philosophers and thinkers (Aristotle, Hippocrates, Democritus), and in the works of some writers of ancient Rome, along with such poets and philosophers as Lucretius, Virgil. The fact of the identity of man and nature, which was discovered by Chateaubriand, was mentioned later in the writings by Victor Hugo, A.S. Pushkin, and many Serbian poets, for example, Branko Radičević, Jovan Jovanović Zmaj, Djura Jakšić, Laza Kostić, Jovan Dučić and others.

J. A. Komenski believed that schools with architecture and neatness should be attractive to children, and advocated for that school premises be bright, clean and tidy. This is the particular set of environmental standards which are relevant today.

I. A. S. Makarenko has attached great importance to order in the area, where pupils live and work, and insisted that they themselves should govern this order and take care of the area.

Nevertheless, the ideas of environmental education has been in existance since the earliest period of the development of civilization, yet in the second half of the 20th century as a result of threats to human health "the need for concentration of knowledge about the possibilities of rational use of natural resources and environmental protection"[3] was reported. The attitude towards this problem preconditioned *The first UN conference on the Human environment* that was held in Stockholm in 1972. , in the foreground is a highlight request constitution international, interdisciplinary environmental education program for young and old. At this conference the declaration was adopted, according to which all countries in the world agreed to make every effort to protect the environment, the latter becoming the part of the general strategy of education among young people. Subsequently, in 1975. the UNESCO and UNEP published the first *International program of environmental education*, the main goal of which was focused on providing the interdisciplinary approach to learn the environmental issues and facilitate coordination among states on planning this education. A significant contribution to the understanding of ecological education was given at the International Conference of *Education of man's environment*, which was organized by UNESCO and the United Nations (UNEP) held in 1975 in Belgrade. At this conference, the main attention was focused on reviewing and defining the goals and objectives of environmental education and it was recommended that the design of programs should serve the adoption of the necessary knowledge to understand the biophysical, social and economic mechanisms that affect the functioning of the environment. This created the conditions for the formation of theory and practice of education for environmental protection.

Later on, the, international conferences and international symposiums on the subject of education for environmental protection organized in Tbilisi (1977), Sofia (1981), Nairobi (1982), Vienna (1983), Moscow (1987), Estergonu (1989), Bergen-Australia (1990), Rio (1992) ...

When it comes to understanding the development of ecological education

in the area of "former" Yugoslavia, based on the analysis of available sources and literature that specifically addresses this issue, we conclude that SASA was among the first to actualize the issue of environmental protection. For this purpose, it organized two scientific conferences including Man and Environment in SR Serbia (1973) and Man - Society - Environment (1979). These parties expressed their opinions and attitudes that gave great impetus to the development of environmental education, and in terms of the problems that occupy our attention it is particularly interesting that, during those sessions the idea appeared that the environmental education should start as early as at pre-school. (Papers presented at a symposium man - society - environment, published by SANU, printed and published in the same name publication 1981). Afterwards the "former" Yugoslavia organized several conferences and round tables, which studied the objects related to environmental education (Education and Environment (Ohrid, 1983), Environmentalism in Primary and Secondary Education (Bled, 1983), Science - Ecology - Schools (Zagreb, 1990), the National Parks in the function of environmental education (Kopaonik, 1992).

A significant moment in the development of understanding of the needs and problems of ecological education in Serbia was the "Ten January game master Serbia", held in Belgrade in year 1992. The main theme in operation of the conference was Ecology Education, and it featured the 30-odd statements and reports concerning the practical experience of environmental education and education in the elementary grades. Also, the 11-th International scientific conference "Vlasina`s meetings" held in 2005 at The Vlasina`s lake, with the theme of rural development and environmental protection, nearly 150 different profiles of scientists (sociologists, philosophers, political scientists, demographers ...) through 80 papers highlight the complexity and seriousness of this issue and the need to protect the environment (Papers presented at the 11th International scientific conference " Vlasina`s meetings" were published in 2006. Proceedings of the title Rural Development and Environment, published by the Institute of Sociology and Rural Development, British Association for the study of agriculture and rural areas, the Yugoslav Association for Rural Sociology and the Institute for Agriculture and agricultural economy Faculty of Agriculture in Zemun, 2006).

However, despite the fact that at the present stage of social development, environmental education has great importance, we have to note that scientific conferences held on this problem did not pay the necessary attention and we come to the almost identical conclusion when it comes to textbook pedagogics. The exception is the Chapter on Educational ecology in the monograph guidance on education by Franz Pediček, and a positive effort towards improving the understanding and awareness of the need and importance of environmental education found in monographs by prof. Milenko Kundačina (factors of ecological education, Teachers College, Uzice, in 1995.) and prof. Milica Andevski (Introduction to environmental education, University of Novi Sad, 1997), and his doctoral thesis, professor Jasmine Klemanović (Ecological education of preschool children defended at the Faculty of Philosophy in Novi Sad, 2004). Resorting to the pedagogical journals, we can conclude that there are individual efforts of some authors towards actualization and solving problems related to environmental education but the general impression is that it is not enough to practice successfully implemented proclaimed

requirements certain legal provisions in this field.

2. Goal and objectives of ecological education

It is well known, that the educational ideal, and therefore the aims and objectives of education in general, results from specific social, economic, political, social and cultural conditions that are predetermined by a certain society. They can change during development as a result of such relationship in educational science; the need arose for concretization goals and objectives of education. Recognizing this demand the concretization is conducted through five fundamental educational areas-physical, intellectual, moral, labor and technical aesthetic, each of which has its cognitive, affective and conative component. However, the development of science and technology and the effects that this development has on the environment, imposed the need for the development of pedagogical science (and not only of it) and the awareness that in the domain of fundamental areas includes educational and environmental education.

2.1. The goal of environmental education

Education of Environmental Protection established a series of documents as preliminary, and the legal program. At the level of the former Yugoslavia it is "Resolution on the goals and objectives of the educational work of protecting and improving the environment" (Belgrade, 1975), and "common core curriculum for basic education and vocational education in the field of Human Environment and Spatial Planning" (Bled 1983).

In 2004 Serbia enacted the Law on Environmental Protection. [7] It deals with the most important issues relating to the preservation and improvement of the environment, the realization of the human right to live and develop in a healthy environment and the balance between economic development and environmental protection. Moreover, the law defines the basic concepts and terms in this field as well as basic principles, among which stands out the principle of integration, the principle of prevention and precaution, the principle of conservation of natural resources, the principle of sustainable development and the principle of polluters.

The ultimate range, i.e. goal to be reached in the environmental education and education relates to the acquisition of knowledge and awareness, and the practice of the environmentally desirable behavior among students and protégés in preschool. This is a very important aspect of personality development in general, and the realization of this objective relies upon a wide range of issues that directly affect success in this domain. One of them refers, of course, to the need and possibility of categorizing and parsing the overall objective of environmental education in the narrower, i.e. specific areas. Trying to adequately address this problem, Ljubisa Rakić in his work subdivides overall goals of education for the protection of the environment into three groups:

- The academic goal (gaining basic knowledge of the biological, physical and social characteristics of the environment)
- The social, economic and aesthetic objective (understanding social values and attitudes related to the natural resources of the social environment)
- The cultural goal (raising awareness of belonging to an individual's own community in which he appears as the subject of protection of their culture). [4]

Professor Alexander Rančić, who also deals with the categorization problem, i.e. that of the general goal of education for environmental protection,

in his monograph Education for the protection of labor and Environmental goals and objectives of Education for the Environment classifies the aims into two groups:

- General (have an educational character and include actions and activities for systematic development of the attitudes and opinions towards humanization and cultural life) and
- Special (have a predominantly educational character and consist of direct acquaintance of students with certain dangers or hazards in a particular environment). [5]

The above-mentioned opinions and observations point at the conclusion, that the essence of the education for environmental protection is reflected in the fact, that the subjects of the educational process, in accordance with social needs and achievements of modern science and educational practice, ensure the acquisition of the basic knowledge about the state of the environment and the processes, that threaten the developing of proper habits and decent treatment of the natural objects. Therefore, there is the necessity of creating the conditions for the inclusion of these subjects into the educational process in order to solve practical problems of environmental protection and improvement. This process should take into account the needs and interests of individuals with regard to the fact, that goals have a complex structure, since they incorporate in themselves cognitive, affective and conative components.

2.2. The tasks of environmental education

The goals of environmental education experience its operational implementation of certain tasks. Analysis of the literature that closely studies this phenomenon points us at the conclusion that in this area there are some differences, both in the formulation of tasks and in their purpose. For example, some authors include a task while others do two, three or more tasks. In the formulation of the tasks of the environmental education most commonly used terms are: to acquire, to understand, to meet, to develop, to inform, to create, to build, to train, to direct, etc..; that indicates that in the foreground cognitive processes are emphasized, while affective cognitive ones are in the background. The attitude towards this problem is not in accordance with the declared requirements, as it is well known that the process of environmental education cannot be reduced to the memorization of facts and generalizations, but should have a broader meaning. Certain problems in this area arise from inconsistently treated tasks' set, which results in the existence of the contradictions between the defined curriculum and educational curricula as it is offered in the official documents and in some documents related to specific situations. Also, clearly and precisely defined tasks of environmental education are too extensive and more declarative, and as such are vague for teachers, which further complicates their work, because under such circumstances they are not sure what, when and how should be done.

Given the fact that the tasks of environmental education are derived from the overall goals and objectives of environmental education, as well as the problems that exist when it comes to their determination, we believe that Professor Milenko Kundačina in the monograph "Elements of ecological education system" gave students assignments on environmental education.. That is consistent with the declared requirements on which depends the successful work in this area. A given system of tasks in ecological education can serve to overcome the problems discussed above. The system tasks ecological education consists of the following tasks:

- Development of the skills of perception of the environment,
- Adoption of a system of environmental knowledge,
- Building the value-ecological systems,
- Ecological habit-forming and
- Mastering ecological culture.[3]

2.2.1. Developing the ability of perception of the environment

It is well known that in the environment there is much that points at the lack of environmental awareness, which results in the formation of negative attitudes towards the youngest community. In such circumstances, one of the priority tasks of environmental education is related to the assessment of the threat, which is not possible without the development of the ability to perceive of the environment. The essence of the task is reflected in building the opportunities within the subjects of the educational process to properly assess the threat. It primarily depends on the knowledge, skills and intellectual capabilities of each person individually. In the context of the problem, the subject activities in the educational process should be primarily directed to:

- the critical assessment of the composition of the environment in each case,
- personal and critical evaluation procedures and other environmentally based forecasting the adverse effects,
- the analysis of individual behavior, attitudes towards the environment. [3]

At the present stage of social development actors in the educational process as a source of information, increasingly use mass media in which it occupies a special place. Therefore, the protégés and students are more informed and the basic task of teachers will have to be focused rather on how to make them more critical than on assessing the vulnerability of the environment, because general ideas about the environmental threats are not a sufficient incentive to concrete actions.

2.2.2. Adoption of a system of environmental knowledge

Knowledge is a philosophical, logical, epistemological, gnoseological, pedagogical, psychological and didactic-methodological category. Clear definition of the term knowledge is the basis for sound policy and determination of the content issues related to human knowledge, such as, for example, the problem of the nature, origin, of the boundaries of cognition or knowledge of the structure and relationship of the individual. From the aspect of the problem, which is the subject of our interest, we are particularly interested in how the concept of knowledge, didactics, i.e. scientific discipline, whose subject matter is teaching, was looked upon in the educational process at all levels of the educational system, since the systematic adoption of environmental knowledge. However, given the nature and structure of this work at this time we do not have the opportunity to present a critical and comparative analysis of the definition of knowledge given in the textbooks, pedagogy and didactics, as well as in the rest of the literature, in which this issue has been processed at certain stages of social development. Therefore, we will mention here that the definition of knowledge given in the work “Problems of modern teaching” by Professor Svetozar Čanović, which is based on the notion, that knowledge determines the system of scientific facts (facts, data, phenomena, details) and generalizations (concepts, courts, conclusions of law the theory) of the objective reality, which are entities that are understood, remembered and permanently retained in the mind.[1] We have chosen this definition as the

most complete, scientifically based, and acceptable, for it incorporates in itself all the relevant elements and guidelines, that the definition of knowledge should include.

Ecological knowledge consists in the concepts, terms, facts, basic laws, the knowledge of the standards of behavior, the knowledge about the qualities of the environment and is an important condition for the adoption of an ecological way of thinking and proper attitude towards the environment as well as the development of other dimensions of awareness. The essence of the task related to the adoption of a system of environmental knowledge relates primarily to:

- Introduction to the basic natural processes that provide consistency and integrity of nature within the limits of the biosphere,
- Introduction to the basic contradictions that exist between nature and society,
- Introduction to the various phenomena of transformation of the environment for the benefit of human health,
- Introduction to the basic aims and means of protection of the environment
- Introduction to the coherence and mutual conditionality of positive solutions to the problems of environmental protection, social and political objectives, the socio-economy of a society and the level of achievement of ecological knowledge. [11]

In addition, in order to adequately adopt the environmental knowledge, it is necessary to know:

- Social, natural, historical, geographical, occupational, technical and aesthetic values of natural and populated areas,
- Ecological processes and principles, which take place in the community life, the causes, conditions, consequences and ways to overcome the situation
- Measures taken by the company in the field of protection and improvement of the environment. [3]

2.2.3. Building of the environmental value system

Each community needs creating its own value system, which meets the protection by its members, including adequate relationship to the values of the environment, whether it is natural or constructed. The rule of the individual's ecological value orientation is variable in structure, due to the value and intensity of emotional relationships. Therefore, the system of education should be directed towards creating conditions that will allow the establishment of ecological value orientation. This process should involve all factors that in any way affect him, starting with the family, peer groups in pre-class firms in the schools and community in general.

There are many examples of positive as well as negative attitudes towards it in the environment, which can result in disorientation that children and young people in the formation of value systems use. For this reason, the process of building up the value of ecological systems is essential, more concrete educational tasks to protect the environment may be developed by responsible behavior of individuals and society, and the realization of the proclaimed task in this area was satisfactory.

2.2.4. Establishment of environmental practices

Life is made up of people from a variety of habits many of which are, for example, hygiene, formed and developed during infancy. Giving that habits is the usual way of movement and behavior, we accept the definition by B. M. Tjeplova

where habits determined to be "aware of the automotive components business, which is trained in the process of carrying out these activities".[10]

It is known that once formed to change habits is difficult. The truth of the claim is that the habit of "iron shirt" and the saying goes, "the habit is an annoyance, and two unlearned." Therefore, it is particularly important to prevent the formation of bad habits. Only those who have the ability of unwavering determination and who are able to consistently carry out without making any concessions, they can learn to manage their habits, and then their behavior.

During the educational process participants have to form habits and environmental assume that is an individual's relationship to the surrounding area. Just like every other and long- formed ecological habit is difficult and slow to change. Their formation is influenced by numerous factors, the most important ones are families, the educational environment and the community and social environment. The aim of establishiment environmental practices is to grow into specific forms of behavior personality, and the most favourable period for their formation is pre-school age and younger. The pre-school age level is that when the child is in pre-school and family adjusts to environmental behavior, doing it, we often do not know that this is the case.

Habits are, at least, solid in pre-school children, and therefore, this period is considered the most favourable period for achieving environmental tranquility of personal behavior. Working in this field, the expected results in the family, especially the pre-school ones, should insist on the development and formation of habits:

- Personal hygiene and hygiene of the premises where the child resides,
- The rational use of natural resources,
- Proper and polite attitude towards the various objects of nature,
- Proper treatment of animals and plants,
- Preservation and cultivation of flowers and greenery and going and spending time outdoors.

2.2.5. Mastering the ecological culture

When it comes to problems related to the mastery of ecological culture, we have to stress mode this process is determined by the possession of knowledge, attitudes, habits, skills, beliefs, norms and moral responsibility towards nature. Ecological culture includes the culture of living, culture, fostering green areas, sanitation and hygiene culture, health, culture and hygiene, work and leisure culture, transport culture, visual communication culture, cultivation of flowers and animals culture, human relations, cultural outings, culture of accountability, horticulture... All these forms of ecological culture can be classified into two groups:

- And residential (use the rooms of the residence) and
- Urban or populated (populated whole).[3]

The formation of ecological culture is a complex process, because there are many factors involved, and what should be pointed out when the problem in focus is, what level of environmental culture of the individual inevitably follows the general level of development of society.

3. Methodological prerequisites and conditions for the successful implementation of environmental problems in preschool education

Among the authors who are in any way with the problem of development and education of children, there is a strong consensus on this, there is no age

limit below which children cannot be educated and educate. Taking this point into consideration, at the beginning of our work, we've concluded that there is no age limit below which children cannot be educated and to educate both the environment and preschool period is an important period for learning the environment, regardless of the fact that a child in this period is not mature enough to understand why this is important. However, taking the goals and objectives of environmental education which were previously discussed, we operationalize that his experience in the educational process technology that is being implemented in preschools, is essential to create the right atmosphere for them, or to make appropriate assumptions and conditions that may be a function of their achievement.

3.1. The methodological requirements for successful implementation of the tasks of environmental education in preschool

The fact that the methods of educational work is the basic prerequisite for the success and implementation of educational activities, one of the central questions that occupy the attention of those, dealing with education and education in general, refers to the problem of their selection and application. Since the development of pre-school period, apart from their development in other levels of education, the methods used in the school cannot be applied to pre-school education and, for this reason, it is necessary to transform according to the characteristics and rules development of that age. We should start with the principle of educational work, respect for children's needs and potential and implementation of educational tasks. In addition, the process should be taken into account and the fact that applied methods of educational work are aimed at stimulating children's internal activities, but without compromising the quantitative and qualitative role of the child in their own development.

The acquisition of diverse knowledge, experience and the awakening of emotions related to the protection and enhancement of the environment can be provided only by active methods and a variety of interactive forms of work.[9] The acquisition of ecological knowledge skills teachers, depending on the conditions in which they implement the educational work opportunities of children and their interests, the nature of materials that children learn, as well as the objectives to be achieved, it may be applied to indirect (going children in the selected objects from the natural and social environment) and direct (immediate indication that . demonstrations and storytelling) methods of educational work. One of the direct methods is that teachers can apply in their educational work, the realization of the goals and objectives of environmental education in pre-school period is the organization of environmental workshops. The workshop includes "specific process of educational work in which the conditions favorable pedagogical and psycho-social climate, gaining new skills or previously acquired knowledge, skills and experience and to check for the plan to be implemented under the guidance of teachers."[8]

What is really important and what we should insists on is the application of relevant direct and indirect methods, referring to a requirement that priority should be given with respect to the inductive deductive approach, especially concerning young children.

One of the most important prerequisites of successful educational work in kindergartens is that coming to the implementation of the goals and objectives of environmental education, related to the recognition and separation of certain environmental principles. However, when it touches upon this

problem, it has to be stressed that there is disagreement among the authors of both the classification and the method of formulating the principles of ecological education. However, considering the demand arising from the goals and objectives of environmental education in pre-school, as particularly important we have selected the following principles:

- Principle-conscious adoption of environmental knowledge a disciple of activities,
- Life-principle of ecological knowledge, skills and habits,
- The principle of respect for individual differences educators in the adoption of environmental knowledge, skills and habits,
- The principle of interdisciplinary,
- Principle link environmental education activities with immediate reality of life and
- The principle of functional application of acquired knowledge in environmental direct life and work situations.

Featured principles of ecological education are interrelated and refer to the entire educational work in kindergartens. Educators should be guided in the organization and implementation of practical educational activities.

In addition to learning the methods and principles, that may also be a function of the successful implementation of the tasks of environmental education in pre-school, which falls within the scope of their teaching methodology assumptions relating to:

- Introduction of educators with knowledge sources (immediate reality textbooks and other printed literature, teaching aids),
- Providing more direct contact with the environment of children (not only workshops),
- Equipment for the kindergarten-appropriate learning tools.

3.2. Conditions for a successful implementation of the tasks of environmental education in preschool

If preschool want to adequately fulfill the goals and objectives of environmental education is necessary, first, to its environment is appropriate. Under the word “environment” in this case we mean the material and technical basis of pre-school institutions, including: the necessary space to work properly, inventory and equipment for physical recreation room, sports court and ecological yard. Architectural properly designed and constructed building preschools with equipment in accordance with modern medicine, sanitation, educational and other requirements a space, where ecological habits and skills of students in the educational process at the pre-degree educational system come to the fore. The structure of building and layout of rooms, courtyards, playgrounds, proper use of equipment and inventory windows and other equipment deserve full attention, too, because all this affects the environmental education of children in preschools. Well-decorated nursery positive impact on children's health, their mood, motivation, and environmental activities, and in some ways is at the heart of ecological culture.

Of course, for the successful realization of the goals and objectives of environmental education in pre-school it is necessary to provide quality, pedagogical-psychological and didactic-methodical and qualified staff. So form a team of experts. There's one more reason, the other services (medical, sanitation, hygiene, nutrition ...) which in any way participate in the overall implementation of the activities in preschools, should be organized in accordance with the requirements of the implementation of which may be the overcoming of problems in this domain exists.

4. Conclusion

The time we live in is characterized by the rapid development of science and technology. As a result of this situation, we have a phenomenon known as "civilizational risk" and the statement that "the ecological crisis became global total and its consequences" can be frequently heard. The ecological crisis reveals the scope and depth of the social crisis and threatens the overall natural and social wealth, and man as a biological being.

Front man and mankind there are only two options-to take care of nature, or in the case of conflict with it to move toward self-destruction. In order to overcome the current situation, you create a culture where the basic idea would be a life, not just human life, but life in general. Education of a system, process and outcome has a key role. It all generations, should allow to adopt ecological culture and develop environmental awareness to be able to think ecologically and environmentally friendly act. From these requirements stems role of those institutions in education for the protection and improvement of the environment, because of the habits that develop and acquire knowledge at this stage, largely depends on the development of environmental awareness of environmental culture and personality in the later stages of development.

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HUMAN MISSION OF EDUCATION

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Abstract. The article examines the complex role and great responsibility of the education today in development of the moral strength and human values of the children and youth. At the beginning of the article the author reconsiders the pedagogical ideas of Maria Montessori and her concept of education for peace as an instrument for reconstruction of the society and for improvement of the human living. Than the analysis of the moral values in the contemporary society is made and several issues and dilemmas are discussed referring the value disorientation of the youth and the importance of the models of adult's moral behavior in their search for personal identity. On the basis of this analysis, the human dimension of the education is elaborated enhancing the need for its understanding as support of development, which is based on several crucial elements: love, freedom and spirit of community.

Keywords: Education for Peace, Moral Education, Moral Values.

1. Introduction

"Averting war is the work of politicians; establishing peace is the work of education." Maria Montessori

In the thirties of the last century the renowned Italian educator and reformer, Maria Montessori stressed the importance of the education for peace. Faced with the dangers of the Second World War that was obviously threatening once again to engulf Europe, and feeling the need and responsibility as educator and already well-known expert in the field of education to contribute to avoid it, she proposed reconstruction of the human society by means of the new education, which should represent non-violent revolution. It is education that creates peace and enables development of human values, especially the moral ones. Montessori emphasized the idea of going back to the child and his potentials, because she believed that knowing them and understanding their development was the key for creation of the peace and well-being in the world. On the Sixth International Montessori Congress that was held in Copenhagen in 1937 she had given her keynote speech in which she declared: *"The adult must understand the meaning of the moral defense of humanity, not the armed defense of the nations. He must realize that the child will be creator of the new world peace. In a suitable environment the child reveals unsuspected social characteristics. The qualities he shows will be the salvation of the world, showing us the entire road to peace. And the new child has been born! He will tell us what is needed!"*[8]

Striving to enhance the vital importance of the education for peace and the need of protection of children's creative potentials, Montessori was giving lectures in many European capitals launching few proposals:

- Establishment of university studies for peace (corsi per la pace). She was convinced that the peace should become a science: *"If man is to overcome war and his own conflicts and complexes, education must be given a scientific basis…"* [8]. The same way there is an "art of making war", there should be a scientific discipline regarding the new education of the man that will contribute to the improvement of his life.
- Foundation of a social party (Partito Sociale del Bambino) to defend the rights of children through official representatives in

the parliaments of all nations: *"Where all pieces og legislation are discussed and where all material and intellectual interests of the humans are nurtured, there also must be someone who will defend the interests of the great majority of the human kind: children"* [3].

- Initiation of an international movement for helping children named *White Cross* (La Croce Bianca). *"Children's' salvation must be a target to anyone who works in the name of humanity"*, is the call she addresses to the international community of doctors, educators and psychologists after the First World War.

Education for peace became Montessori's main interest and occupation during the last twenty years of her life and, as a result of that, she was nominated for the Nobel prize for peace. However, since the 1937, when she initiated the Social party of the child up to present day, her words haven't become reality and her ideas for the "small ones" have remained utopian proposals that could not prevent or stop the dreadfulness of the war and other evils made by the "big ones". Nevertheless, her basic idea that the education is a miraculous tool for freeing from the violence and approaching towards peace is still significant today and deserves to be reconsidered, as well as the education of the young generations and our role as educators and teachers.

2. The moral values and contemporary society

The question about the target values toward which we need to strive today, reminds open. The Republic of Macedonia, as well as other countries that experienced the disintegration of the socialistic state system, in the last two decades has been facing with the changes of the value system. They are associated with turbulent social changes that, again, led to economic, political, cultural and moral crisis. Brotherhood and unity, solidarity, state ownership, equality, self governance, the communistic ideal, for a long period of time were the basic values of our living and of family and school education. Nowadays, not only that they are not valid but are often not considered as values.

On the other hand, the question that imposes is if the newly formed value structure in the social life should really be considered as progress and perspective. Are the new values truly incorporated in the daily activities and behavior of adults and youth? Is the accepted pluralism always conveying tolerance for the ones with different opinions? Does democracy mean equality for all? Does the scientific-technical and technological advancement mean also peoples welfare, advancement in the sense of continuous engagement for personal improvement, striving toward noble goals and giving personal contribution for being more human? Unfortunately, today there are numerous indicators, not only locally but as well globally, of increased violence, division and intolerance among people on different grounds, of confining in personal egoism, nation and religion, as well as of increased material and spiritual poverty and exclusion. Therefore, the controversial thesis of Rousseau (developed in the essay that won the competition at Dijon Academy in 1750) that progress of science and culture development leads to regression of morality, imposes with relevance in the contemporary world. Civilization spoils the moral, as emphasized by the great French educator of the 18 century, because the art is in the function of luxurious life, the science of law is in the function of injustice, history is in the function of tyranny and wars [9]. In such conditions of division, moral decline and alienation, that are not much different from Rousseau's time, education appears

as powerful instrument of change of society through building of moral values and behavior of children, youth and adults.

The contemporary society, generally speaking, is a society of challenges, change, insecurity, uncertainty and unpredictability, open possibilities and alternative models of interpretation and acting, a world of super complexity, as called by some authors.[2] This world requires persons that are initiative, energetic, self-confident, persistent, capable and ready to deal with the challenges and to generate new changes. Nonetheless, the today's world witnesses Spenser's interpretation of Darwin's theory of survival of the strongest in social context: survives and succeeds the one that manages to overcome the competitors, regardless of the means used, because the goal (success, money, power) justifies all means. Therefore, this era creates successful and rich people, but also ones that are aggressive, ruthless, prepared for manipulation and dishonesty, and that have personal benefit as a driving force in interpersonal relationships.

The children and youth are witnesses of these social events. In the circumstances of social turmoil, undefined educational ideals and values as well as disorientation, young generation in search of personal identity, meaning and values of life, develop personal value code and pattern of behavior, primarily, by undertaking or refusal of models of moral behavior of adults. Basically, the imposing question is: what do they find important in life, what are they striving for? The diagnostics of the values and ideals of nowadays students and their behavior doesn't leave too much space for hope in brighter future, but is rather increasing the awareness and need for wider social action. Since the eighties, psychologists that were studying the behavior of the American youth are warning that the basic measurement for youth is money; and furthermore: they want it *all* and they want it *now*.[7] It looks like this condition is not characteristic only for American pupils and students from twenty years ago, but it's widening in space and time. The principle of utility that at one time of human development gave way to the spiritual criteria of value behavior of man, is having its comeback, wearing the apparel of material welfare and power. These determinants certainly mean distancing from Man and from his strife for peace. Therefore, educators have a holy duty and a big responsibility to change this value orientation and to help a child and a youngster in their walk toward humanity and peace. In fact, the delicacy and complexity of the educational mission of parents and teachers is in humanization of ruthless pragmatism of contemporary living with spiritual universal values that, at the end, make Man human in a real sense of the meaning.

3. What kind of education is needed?

The education is primarily an ethical question, because it provides the development of human values and constructs the culture of peace. Therefore, the key task of educators, namely, parents and teachers, is to guide and lead the process of continuous approaching towards humanity within oneself as well as within the ones they educate. That is conducted through continuous questioning of values, attitudes and behavior; fulfilling in that way the humanization of the world we live in.

In the last decades the main attention in the area of education is focused toward improvement of the school system: raising of educational standards, increasing of achievements of students, improvement of quality of work of the teachers and schools. As a necessary consequence, these reforms emphasize the priority of market mechanism, competitiveness, and effectiveness of the results. In such conditions, humanistic dimension of education seems to be put

aside, and the sense of morality and social responsibility are neglected or ignored. Emphasizing of free market approach and promotion of competitive society means moving away from the basic goal of education that comes from the etymology of the word education (ex-ducere=pulling out), that in fact means, assisting of the development. "*Our hope for peace in the future*, pointed out Montessori, w*ill not be found in the formal knowledge that the adult can convey to the child but in the normal development of the men*". Therefore, it is necessary to go back to the origins of education and to search the key for overcoming the contemporary social and moral deviations.

Each child represents a wealth of potentials, energies and powers, from which a great part resides undiscovered, undeveloped and unused in life. Therefore, this potential has a great creating force and needs to be a starting point in educational process. In order to extract the potentials from each person, it is necessary to approach them with respect and knowledge about the developmental characteristics and to create stimulating environment that gives directions to the activities for complete development of the person. This environment consists of several key elements that represent the basics for each education:

Love. Translated into the language of pedagogy, love means care and acceptance of the pupil, warmth, joy and commitment, respect and understanding, carefulness in attitude toward him, sensibility for his needs, trust in his potentials and abilities. If the educator treats the child accordingly, the risk of appearance of "wars" between parents and children, teachers and students is reduced to minimum. This also means prevention for numerous manifestations of deviant behavior of youngsters (runaway, lying, stealing, violent behavior). Indeed, love toward child and mankind in general is the key necessary element that makes education a mission of a higher goal. Therefore, education is more than a science, it represents art, the hardest, but the biggest, the most noble and the most important of all human arts, that assumes not just knowledge, but a gift, and a virtue as well, the one that penetrates the mind as light, through the filter of heart so it is to be transformed in the "character of strenght, beauty and freedom" [1] for the one that teaches and for the one that learns.

Freedom and independence. Closely connected with love is the idea of freedom in education, incorporated in the pedagogical concepts of Rousseau (the theory of natural and free development), Froebel, Dewey and Montessori ("*Help me to do it myself*"). Freedom is a condition for manifesting individuality and for initiating physical, but also different intellectual activity: initiative, independence in observation, critical thinking, prediction of consequences, and creativeness in adjusting to them. The freedom and independence are basis for building the relationship of mutual respect and understanding between adult and a child, that result in shaping the individual that is self-confident, fulfilled and capable of making moral decisions without fear and dependence on the opinion of others. Thus, in the process of education it is indispensable a free development of a child and creating of such conditions that "will enable the individual to give his contribution in the group interest, as well as to participate in such activities in which social leadership will be focused on his personal mental behavior, and not to the authoritarian mandate of his actions" [4]. The role of education is to give directions to child activities and to provide normal conditions for the development of his personality, and the teacher instead of imposing, needs to "wait and observe" (*"osserva aspettando"*) (Montessori), based on this, to "interprets and directs" (Dewey) and in such way "to free the life-process for its own most adequate fulfillment" [4].

Community spirit. Education in a democratic society must equip children and youth to live in a community in which making decisions will not be an individual act, but taking into consideration the needs and interests of others: *"Education should create an interest in all persons in furthering the general good, so that they will find their own happinessrealized in what they can do to improve the conditions of others"*[6]. Despite competitive mechanisms of market economy, in the educational process, primarily, there is a need to nurture humanity and mutual assistance; contrary to competing spirit, cooperation and communication; contrary to exclusion and self-sufficiency, tolerance and solidarity. From the early childhood it is necessary for children to become aware of the consequences of their actions not just in the development of their character and life but also in the lives and characters of others. Only in that way education will be in the function of achieving the great life goal: joint work for common good.

4. Conclusion

The education is a process, a continuous journey, continuous vouching for change and improving of the world and one's self. Contemporary education is confronted with numerous challenges that are pointing out to its human dimension: multiculturalism, inclusion, protection and preserving of environment. In the attempt to respond to these challenges, educators are fulfilling their fundamental mission: to create people. That means that primarily they need to represent a model for moral behaviour that witnesses the importance of the acts and their consequences and the personal contribution to creation of better community. Shaping in that way their own life trajectory, they leave legacy for the future generations: we all have the obligation to strife toward humanity.

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HANDWRITING AS A MEANS OF COMMUNICATION AND IDENTITY OF EACH NATION

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Abstract: The article presents the fundamental element of the identity of each nation, which appears to be handwriting. The basic structure of Czech handwriting is explained. The written form is presented as a part of literacy, or more precisely reading literacy. The article refers to the differences of joined-up linear handwriting, according to which handwriting is taught in the Czech Republic.

Keywords: handwriting, joined-up linear handwriting, literacy, reading literacy, national identity, shape elements.

One of the basic requirements and objectives of the current education in the Czech Republic (also referred to as CR) is to teach pupils to read and write perfectly. This does not involve more reading and writing skills as essential means of communication but particularly acquiring reading literacy, which is inseparably related to writing literacy. In this respect, literacy as such is considered.

According to the Dictionary of Education [5] literacy is: *'...a competence of an individual to read, write and count acquired usually in the initial years of school attendance. This is 'a basic literacy', which constitutes a prerequisite not only for further education but also for self-realization in the society.'*

Writing has been subject to historical development. Each newly created civilization wanted to leave their legacy. The simplest form of recording was writing as it had been preserved for centuries. However, the forms of writing were not unified and each civilization created their own characteristic writing. Various forms of writing include the quipu, a specific form of writing of the Indians, hieroglyphic, cuneiform or pictographic writing. Some of the preserved written relics indicate that writing developed through time, became simpler and more professional.

To a large extent, current handwriting was influenced by Roman handwriting, from which Roman capitals developed. Roman capitals had a significant influence on the development of Latin handwriting, which is still used today in certain variations. The final developmental stage of Latin handwriting was Carolingian miniscule from 9th century AD.

With respect to Carolingian miniscule we must not forget that this completed the shape system of two alphabets – small and capital alphabet – as used today. This fact is referred to by Václav Penc in his book published in 1961 [4]. In spite of the invention of letterpress printing around 1445, handwriting and hand copying was still significant. There were increased demands on the speed of book copying, and to achieve this requirement, the handwriting was slightly slanted to the right so that scribes could see it. Another change was the links between the letters, which eliminated interruptions between strokes and allowed scribes to be faster.

Handwriting reflecting these changes is called cursive and originated in the Renaissance period. '*Renaissance cursive immediately precedes our current handwriting* [4].'

Latin handwriting, i.e. shapes used today, was introduced in schools in 1849. The model of contemporary handwriting has its roots in penmanship types of 19th century. In 1932 there was an educational reform in Czechoslovakia and handwriting

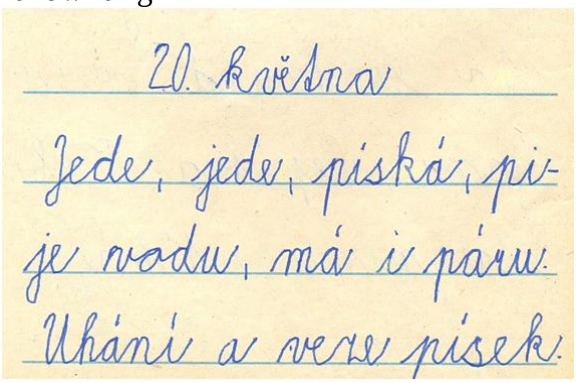
was changed to single linear instead of shadow. In 1950s this type of handwriting was modified by Václav Penc, who created new handwriting shapes, which are still used today with almost no changes [4]. For the last time, this handwriting was modified in 1970s.

Figure 1. Current shapes of letters and numerals [6]

The result of the methodology of elementary writing in the Czech Republic is joined-up linear handwriting. Linear handwriting is a type of linked handwriting, which is specific and differs from handwriting used in Anglo-Saxon countries. As mentioned above, joined-up linear handwriting is historically based on the development of Latin handwriting in Europe. We are aware of the fact that Czech handwriting differs from the surrounding countries except Slovakia. The requirements applicable to pupils in Czech schools are legibility and correctness of handwritten words and sentences according to a specific standard. Rather than strict observance of the standard, emphasis is put on legibility and appropriate writing pace. In this respect, quality as well as quantity-based features of handwriting can be assessed. Quality-based assessable features of Czech joined-up linear handwriting include letter shape, letter size, proportionality and even direction of letter size, density and rhythmization of handwriting and layout of written records. Quantity - based handwriting features include speed, which is expressed by the number of letters written during a period of time, usually one minute.

One of the most remarkable characteristics and differences of Czech joined-up linear handwriting is the shape of letters and numerals. The shape can be classified into 10 groups according to typical features. The first group includes letters with **upper loops** (e.g. e, l, b, f, 1, 4…). The second group is typical of the so-called **upper, lower and combined slanted loop** (e.g. i, u, m, n, v). The main shape of the third group is the **left curve** (e.g. C, Č, E, CH, 6…). The **closed oval** is a typical feature of the fourth group of letters (e.g. o, a, d, 0, 9). The fifth group includes letters with the so-called **lower loop** (e.g. j, p, g…). The sixth group is typical of curves with special cases of **snake-like shapes** (e.g. I, J, H, K, 8, 4…) – a typical feature of joined-up linear handwriting. The seventh group is represented by the **vertical snake-like shape** or **wave with a spiral** (e.g. P, B, R, T, 8, 3, 5…), where the left and right curves are connected. The **wave** is another basic handwriting shape (e.g. L, D, Z, Ž, 7, 2 …) and makes up the eighth group. In this group of shapes the wave is joined with the right and left curve (e.g. S, L,) and with the wave. The ninth group consists of **individually ordered** letters (e.g. r, ř, s, š…). The tenth group includes **Roman numerals** (I, V, X, L, C).

Figure 2. Illustration of handwriting



Author´s portfolio

Apart from letter shapes, a typical feature of Czech (Slovak) handwriting includes links between letters. Except the first grade in which the speed of handwriting is not monitored because the handwriting habit is not sufficiently automated, an average number of letters per minute (as mentioned above) is specified for each grade. According to Křivánek and Wildová [2], in the second grade pupils produce approximately 20 letters per minute, in the third grade 30 letters per minute, in the fourth grade 40 letters per minute and in the fifth grade around 50 letters per minute. Quantitative assessment is only approximate and is not strictly observed due to individual particulars of each individual.

An important part of training of writing in the Czech Republic is intrinsic pupil motivation in elementary school. In the Czech Republic pupils start school at the age of six. Training of elementary writing goes hand in hand with elementary reading. These two activities cannot be separated. The methods used for training of writing and reading in elementary grade are designed for developing common skills used in both activities.

'As in other countries, emphasis is placed on reading and writing literacy of pupils. These are abilities to use writing or reading as means of lifelong learning and to develop communication skills as possible sources of spending leisure time as well as overall personality development'. [7]

Successful and problem-free training of writing skills requires a number of skills that are developed within pre-primary education, i.e. in kindergartens. Graphomotor skills in children who start elementary education in elementary schools should be at a certain level. One of the requirements for successful acquiring of writing is to observe correct hygienic writing principles. These principles are included in the analytical-synthetic method used in training of elementary reading and writing.

Appropriate hygienic and working habits in teaching elementary writing are of a critical importance for further balanced development of a child and serve as a form of prevention against various orthopaedic disorders that could develop in children as a result of an incorrect sitting position.

'Obviously, it is more effective to adopt correct writing habits than to relearn incorrect stereotypes. This takes much more time compared with acquiring correct habits from the teacher. By systematically reminding pupils of hygienic principles and constantly repeating and correcting those pupils who do not observe these principles, pupils acquire neat, even and linear handwriting.' [1]

The character of written relics signifies the level of the culture of a nation. It is an expression of a nation's identity. For these reasons each nation protects its intangible wealth in the form of documents that can be surely preserved for future generations.

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CREATION AND EXPLOITATION OF POSITIVE IMAGE OF SPORT IN SOCIAL AWARENESS

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Abstract. A positive image of sport working on purpose of its institutional reproduction is being created based on the analysis carried out by mass media. The attention is paid to the fact that the society is not properly informed about the existential problems that a sportsman faces; costs are not revealed – mostly human (physical and psychical health, life, material welfare) – concerning those who create sport – sportsmen and trainers. Sport is mostly considered as an important means of ensuring and developing culture, supporting national authority, creating people's unity, a way of manifesting personal heroism.

Keywords: sport as a sociocultural institution, image of sport, social awareness, sportsman.

Addressing to the issues of contradictory being of sport is defined by a high social request for a comprehension of its nature at the same time without serious theoretical researches of sport phenomenon. Modern literature about sport mostly focuses on popularization of sport in all its manifestations – historical and cultural, theoretical, ideological than on a serious philosophical and socio-cultural analysis.

Sport like any sociocultural institution is organized for self-sufficiency and self-reproduction in society and generations: economic, organizational, ideological. Ideological sufficiency means that in social awareness sport through its own and other means of mass information creates an attractive image, working for reproduction purposes of sport. The main criterion of that image is the ideology of sport, including the conceptions of cultural, political, social and individual importance of sport (there is no need for the conception explaining the economic importance of sport– it is determined by the market).

These conceptions, which can be also called institutional archetypes of social awareness, work at two levels – informational and visional.

At the first level that is in mass media the cognitive aims describing all phenomena, events, scenes and sport activity in whole are realized, exceptionally from the point of view of its praising, glorifying and honoring.

At the visional level sport is an important tool for providing and developing the level of culture, keeping national authority in international society, creating national unity and to top it all it is practically the only way of demonstrating personal heroism in modern terms. At the same time costs are not properly revealed (often they are not revealed at all) – uppermost human (physical and psychical health, life, material security) – concerning those who do sport – sportsmen and coaches. As a result, the audience getting used to trust mass media is purposefully deceived, knowing nothing (and having no desire to learn) about risks connected with the sport participation and a number of sportsmen start-ups and even mature, facing failures in their "mission", losing their health or lost, "forgotten" coaches, etc.

Statistics of such events is poor. 99% of all provided information about sport events is aimed at making the audience have a feeling of deep admiration of winners and organizers of sport competitions. Only 1% of information is devoted to tragic accidents which are impossible to hide and therefore they should be somehow acquitted (it is not difficult to do it) and moreover – to earn on

sensation. Nowadays the first place in mass media belongs to information about the earnings of top-sportsmen (3), which reflect the business aspect of sport as a social institution; selection, choice, preparation and education of young sportsmen is done under slogans of worldwide fame and highest prosperity of champions, those who could become the latest. Focus on consumer psychology has been working for already thousands of years: why not me? And what if it would be me? And why not risking? What if it works, when you push yourself to the limit and even more? Relying on a player's passion makes sport a huge pyramid where figures, put on hundreds thousands of unlucky people, have everything. For business sport as well as any other social and economic institution is only a tool of enrichment, and from the point of view of a businessman, who is wittingly out of morale sphere, all sport delight and anxiety, personal (physical and psychical) problems and etc. – is not more that a way of attracting audience, paying for sport spectacles and ensuring profitability of his investments into sport. Moreover, such kinds of events are often organized just for increasing agiotage and getting higher profits. That is business interest (mostly – totalizator) that is the reason of all violation of sport rules and laws: contractual and criminal losses. But this attitude is never flaunted and is not an essential in social opinion of sport. Public is not interested in it, and sportsmen consciously do it making the sacrifice of their reputation and health for the sake of success.

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Human, brought up with professional sport ideology is not able to prejudice the cultural value of sport even he has "failed"; it means that for social society he is just a simple "material". Such "material" is entangled in sport from the very "tender" age with the prospect of achieving higher results; an undercover agreement between parents and coaches is concluded (4, 5, 6). Thus, 90% of parents bring their children to the trap, not realizing it; but unlucky sportsmen do not like talking about their failures, all the more – about their life crash, and such kind of statistics is not given.

Until recently the appraisals of sport failures are expressed in such verbal phrases as: «bad luck», «anything is possible», «no luck», etc., without any sense. Nowadays, when dangers of sport have become more obvious for the public, a sport ideological popularization which has to refute all negative appraisals and arguments against sport is being applied. Thus, on site «sport-kids.ru» there are two articles (at on the one page), in the first one – drawbacks of sport are set forth. O. Arnold writes: «Overloads hold up growth, mutilate figure, and disturb most organism functions. If a person gets used to heavy loads from an early age, it inevitably rivets him to sport once and for all; he has to keep fit until ripe age, train – for himself - all his life. Otherwise he will feel bad and surely put on weight – it is a physiology. »; «If your child seriously does sport, control the process constantly. Keep watch on what "vitamins" he is given, find out about

their ingredients. Don't accept any hormonal "extra nutrition"! »; «Sport is considered to temper the character and in case of strong personalities it is really so. But sometimes it breaks. For too sensible people, who are tend to feel everything keenly in their everyday life and lose heart, permanent emotional differentials , connected with competitions, lead to nervous breakdowns. Naturally, such children rarely reach sport heights – only if they are talented for certain kinds of sport, according to a trainer. Then the trainer does his best for making his trainee show necessary results, not caring of his moral health. But non-persistent natures, appearing themselves out of the picture in the twilight of sport career, simply knock themselves out» (1).

The author of the second article gives his counter-evidence, deserving a lot of interest. He writes that it is not necessary to make conclusions from particular cases and create the image of sport only based on negative moments; that risk is everywhere and sport is not exclusion: there is more risk in sport than in life as a whole. Post-sport problems of sportsmen, in his opinion, are usual problems of everyone everywhere and some of them depend on personal qualities of sportsmen who enhance their reputation by stories about their injuries. Besides, we must not accuse sport of its harmful consequences – a sportsman knew what he was going to do (and if he did not know or was he under pressure of parents, friends, trainers, sport popularization?); and it is a woman in sport who goes the straight road to family success. Emotions, in the author's opinion, are connected with victories in sport – the highest that a person could have in life (this argument, according to the author, is meant, mostly, for teenagers: that is if he does not become a champion, and what to do with emotions of losers, whose number prevails?); there are worse cases where an ex-champion or a loser is left, but "it is within our power not to admit it, right?» (but how?); of course, we should know when to stop at trainings: it is over reasonable limits – it could bring harm to a sportsman, but to learn about sportsman's abilities can be by trying loading him more and more, - that is sport (until he falls); and it would be very offensive for a child especially in case he has bents for it to realize that having been already an adult he has lost his excellent opportunities (certainly, it is more offensive to realize in old age, that sport has ruined your life); in general, it is sport that gives a person a genuine sense of life (even it makes him a cripple); it is sport that ensures super health: «Sportsmen recover from illnesses easier than usual people— it runs in their blood. Unsportsmanlike person is defenseless in front of illnesses and aging. His "instruments" – medicine and queues in clinics. A sportsman, even an ex-one is arm and prepared. He is able to mobilize duly his extra organism resources if necessary"; only sport makes a person a real person: «Big sport is notable for its responsibility. Here the habit to work for conscience is cultivated. And one more – to create new opportunities, learn previously unknown psychology depths. An ability to work one's way up to the end and finish is created. In principle, it can be learnt without sport – by mature age. Sportsmen, as a rule, are familiar with it from their youth – and that is why they have an advantage over ordinary people» (2). Another argument intended for teenagers: die in a fight on the ring, at a finish line of a track race, on a tatami, under a bar, etc.

That is a demagogy that is used by mass media to make a fool of teenagers and uninformed adults, worrying about their children's future.

Since the time immemorial the image of a sportsman-hero has been considered as one of the most respected in any cultural tradition and all the people divide into those who would like to be famous sportsmen and those who worship them (supporters and fans). Till the middle of

XIX century the social "image of a sportsman" and his professional way of life was not compared: it was considered as something dishonorable and his secrecy increased his status. But since the middle of XIX century, when sport started having its own professional and economic fundamentals, became a business, everything has been changed. It has been required to ensure all possible conditions for a victory, mostly from a sportsman himself, including his utmost physical development in a certain kind of sport at maximum training. It has given birth to shocking disproportions in sportsmen's bodies (which were easily accepted by public: a winner is not judged), following by a number of professional sport diseases (namely, "sport of high achievements generated such phenomena as "overexertion" and "overtraining" of sportsmen). The next step of commercialization – "image of a sportsman", that is his promo image, which currently prevails not only his professional one, but his personality as well.

Thus, the integral focus of sport moves from the personality of a sportsman to profits and revenues from his "performances", as a result, the "image of a sportsman" is now defined not by a naturally formed personality, but purposefully projected: appearance, manners, behavior, speech and etc. All these things somehow or other contradict with a sportsman's habits, psychic and world outlook. If earlier only utmost effort of will was required from a sportsman – during trainings and at competitions for mastering better skills and physical shape and the main problem was injuries, professional diseases and poor retirement, but now it has stopped being the most important: contest can be purchased and a sportsman will win in spite of his real sport qualities. It means the degeneration of proper heroic qualities in a sportsman-human that leads to a crisis of his personality, neuroses and psychoses and even suicides.

If earlier, all these problems were not taken into attention, currently the "image of a sportsman" has been significantly enriched: now, apart from usual advertising images, it also includes his artistically treated professional and sport biography, as well as suitable elements of his personal biography; for increasing the image of a sportsman different kinds of scandals among his encirclement are used and even organized, - for mass media any sensation is good and for sportsmen – it is a reason for pay rise. Of course, a tragic fortune of a sportsman is difficult to name a sensation, but nowadays it can also be stuff for mass media.

Thus, only enlightenment of society about what sport is really is can decrease the harm it brings to people involved in it.

For many years there has been an argument about what happens with human health society wide: medical statistics says about its mass decrease, increase of morbidity, appearance of new diseases and others. The reasons for such state of things are very different phenomena – from global environment pollution to the influence of aliens, but when the question arises – how to resist this destructive tendency, sport declares its claims: only joining to sport can strengthen human health. At the same time it is not usually defined if the matter is about high achievements of sport, regular exercises or any other activity involving physical loads. That recognition is explained only by researchers who criticize sport; those who really praise it, distortedly attach the progress in treating people, who just do their regular exercises.

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APPROACH TO CYBER SECURITY ISSUES IN NIGERIA: CHALLENGES AND SOLUTION

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Abstract: Cyber-space refers to the boundless space known as the internet. Cyber-security is the body of rules put in place for the protection of the cyber space. Cyber-crime refers to the series of organized crime attacking both cyber space and cyber security. The Internet is one of the fastest-growing areas of technical infrastructure development. Over the past decades, the growth of the internet and its use afforded everyone this opportunity. Google, Wikipedia and Bing to mention a few, give detailed answers to millions of questions every day. Cyberspace is a world that contains just about anything one is searching for. With the advent of these advancements in information accessibility and the advantages and applications of the internet comes an exponentially growing disadvantage- Cyber Crime. Cyber security has risen to become a national concern as threats concerning it now need to be taken more seriously. This paper attempts to provide an overview of Cybercrime and Cyber-security. It defines the concept of cybercrime, identify reasons for cyber-crime and its eradication. It look at those involved and the reasons for their involvement. Methods of stepping up cyber security and the recommendations that would help in checking the increasing rate of cyber-crimes were highlighted. The paper also attempts to name some challenges of cybercrime and present practical and logical solutions to these threats.

Keywords: Cyber-space Cyber-security Cyber-crime, ICT, Internet

1. Introduction

From business, industry, government to not-for-profit organizations, the internet has simplified business processes such as sorting, summarizing, coding, editing, customized and generic report generation in a real-time processing mode. However, it has also brought unintended consequences such as criminal activities, spamming, credit card frauds, ATM frauds, phishing, identity theft and a blossoming haven for cybercriminal miscreants to perpetrate their insidious acts.[13] This paper hopes to paint a developing scenario of the evolution of new type of war - the internet cybercrime - which will cause destruction of greater magnitude than the two past world wars- if not properly nipped in the bud. It has been established that Nigeria is an impressionable country. The advent of the internet to her was both welcome and full of disadvantages. The exceptional outbreak of cyber-crime in Nigeria in recent times was quite alarming, and the negative impact on the socio-economy of the country is highly disturbing.

Over the past twenty years, immoral cyberspace users have continued to use the internet to commit crimes; this has evoked mixed feelings of admiration and fear in the general populace along with a growing unease about the state of cyber and personal security. This phenomenon has seen sophisticated and extraordinary increase recently and has called for quick response in providing laws that would protect the cyber space and its users.

The first recorded cyber murder was committed in the United States seven years ago. According to the Indian Express, January 2002, an underworld don in a hospital was to undergo a minor surgery. His rival went ahead to hire a computer expert who altered his prescriptions through hacking the hospital's computer system. He was administered the altered prescription by an innocent nurse, this resulted in the death of the patient.[10] Statistically, all over the world, there has been a form of cyber-crime committed every day since

2006.[15] Prior to the year 2001, the phenomenon of cyber-crime was not globally associated with Nigeria. This resonates with the fact that in Nigeria we came into realization of the full potential of the internet right about that time. Since then, however, the country has acquired a world-wide notoriety in criminal activities, especially financial scams, facilitated through the use of the Internet.[14] Nigerian cyber criminals are daily devising new ways of perpetrating this form of crime and the existing methods of tracking these criminals are no longer suitable for to deal with their new tricks. The victims as well show increasing naivety and gullibility at the prospects incited by these fraudsters.[18] Since the issue of cyber security is raising a number of questions in the minds of Nigerians, it is only fair that we answer these questions. This paper seeks to give an overview of cyber-crime and cyber-security, outline some challenges and proffer solutions.

2. Literature review

The issue of cyber-crime is one that has been discussed by many people with various perspectives on the issue, most coming at it from different sides than the others. Cyber-crimes have gone beyond conventional crimes and now have threatening ramifications to the national security of all countries, even to technologically developed countries as the United States.[7] According to a publication in [20] which states that "the adoption by all countries of appropriate legislation against the misuse of Information and Communication Technology (ICT), for criminal or other purposes, including activities intended to affect the integrity of national critical information infrastructures, is central to achieving global cyber security". The publication further stated that since threats could originate anywhere around the globe, the challenges are inherently international in scope thus requires international cooperation, investigative assistance, and common substantive and procedural provisions". In line with the above, Professor Augustine Odinma states that "cyber-crime is any illegal acts perpetrated in, on or through the internet with the intent to cheat, defraud or cause the malfunction of a network device, which may include a computer, a phones, etc. The illegal act may be targeted at a computer network or devices e.g., computer virus, denial of service attacks (DOS), malware (malicious code). the illegal act may be facilitated by computer network or devices with target independent of the computer network or device".[5] Relating cyber-crime to the military in a paper depicting his vested interest in the country's military well-being, Major General Umo outlines that cybercrime, cyber terrorism, cyber warfare, cyber security are one and the same thing. This is because, stealing or forgery directed at an individual or an organization is synonymous to waging war on the target of the crime.[4]

Statistically, Nigeria ranked 43 in EMEA and ranked third among ten nations that commits cyber-crime in the world.[5] As a corrective measure, the then President of Nigeria, Olusegun Obasanjo set up National Cyber security Initiative (NCI) in 2003. The Nigerian cybercrime working group (NCWG) is to meet the objectives of NCI but their effects did not match up to the rate of growth of cybercrime. Professor Oliver Osuagwu, relating cyber-crime to the collapse of the educational sector, points out that cybercrime is causing near total collapse of the education community, particularly in Nigeria, with over 90% of criminals coming from this sector. Wrong value system has been identified as key factor encouraging cybercrime in Nigeria and the desire to get rich quick without working for it. Cyber-crime is complex and committed mostly from remote locations making it difficult to police. The absence of enabling law makes policing even more difficult.[9]

As earlier stated, the internet has a capacity for more good than bad. This is better explained by Mrs. R. Moses-Oke in

[14] when she said "The oxymoronic nature of the Internet is one of its unforeseen attributes; at its inception, no one, perhaps, could have clearly foreseen that, and how, the Internet would someday become a veritable platform for globalized criminal activities. As has been copiously remarked, the benefits of the Internet have so often been tainted by its versatility for virtual criminal activities that have vastly devastating physical and social impacts". Many will agree that concerns are increasing as Nigeria is increasing its digitalization not only in the area of commerce and communications, but gradually into the area of electronic banking. In the past year, electronic banking and the cashless initiative have been in focus a lot. Amaka Eze in her article [12] for THISDAY live writes, "As the country integrates electronic payment system into its financial institution; a step that is expected to accelerate the nation's e-commerce growth, the negative impact of cybercrime on businesses, and the absence of appropriate laws to guarantee the legality of online transactions, continue to create fear in the mind of users and potential online users". Even as we talk about the rise and dangers of cyber-crime and breach in cyber security, there is need to focus on a way to reduce or completely eradicate its incidence in Nigeria. To restore the full glory of cyber security, those involved have to spend time to learn how cybercrime ring operates and then devise strategies to fight the menace. We cannot fight today's crime with yesterday's technology. It will always be a losing battle if security professionals are way behind the cyber criminals in terms of technological knowledge. It's not just about computing skills, but IT Security expertise.

Also discussed previously are the costs incurred by the government due to the rise of cyber-crime. As for measuring costs, the Detica report in [3] considered four categories: costs in anticipation of cybercrime, such as antivirus software, insurance and compliance; costs as a consequence of cybercrime, such as direct losses and indirect costs such as weakened competitiveness as a result of intellectual property compromise; costs in response to cybercrime, such as compensation payments to victims and fines paid to regulatory bodies; indirect costs such as reputational damage to firms, loss of confidence in cyber transactions by individuals and businesses, reduced public-sector revenues and the growth of the underground economy. Having seen cybercrime from different perspectives, we would now discuss fully on cyber-crime and cyber-security, practical instances and solution mechanisms in the following sections. Much has already been done by the law enforcement agents, but cyber-crime is still perpetrated underground.

3. Overview of cyber-crime and cyber-security

As technology has developed so have also the definitions of cyberspace, cyber security and cybercrimes. It has been argued that since computer crime may involve all categories of crime, a definition must emphasize the particularity, the knowledge or the use of computer technology. Cyber-space refers to the boundless space known as the internet. It refers to the interdependent network of information technology components that underpin many of our communications technologies in place today. Cyber security is the collection of tools, policies, security concepts, security safeguards, guidelines, risk management approaches, actions, training, best practices, assurance and technologies that can be used to protect the cyber environment and organization and user's assets. Organization and user's assets include connected computing devices, personnel, infrastructure, applications, services, telecommunications systems, and the totality of transmitted and/or stored information in the cyber environment. Cyber security strives to ensure the attainment and maintenance of the security properties of the organization

and user's assets against relevant security risks in the cyber environment.[20] Cyber-security is the body of rules put in place for the protection of the cyber space. But as we become more dependent on cyberspace, we undoubtedly face new risks. Cyber-crime refers to the series of organized crime attacking both cyber space and cyber security. Sophisticated cyber criminals and nation-states, among others, present risks to our economy and national security. Nigeria's economic vitality and national security depend on a vast array of interdependent and critical networks, systems, services, and resources known as cyberspace. Cyber-space has transformed the ways we communicate, travel, power our homes, run our economy, and obtains government services. Cyber-security is the body of technology, processes and practices designed to protect networks, computers, programs and data from attacks, damage, or authorized access. In the computing or cyber context, the word security simply implies Cyber-security.[19] Ensuring cyber-security requires coordinated efforts from both the citizens of the country and the country's information system. The threat posed by breaches in our cyber-security is advancing faster than we can keep up with it. It is not possible to concentrate efforts on only one aspect of the breach as it means negligence and allowance of growth for other aspects of the breach. This leads us to conclude that we have to attack cyber security breaches as a whole. What then are these breaches?

Cyber-crime refers to criminal activity done using computers and the Internet. This includes anything from downloading illegal music files to stealing millions of dollars from online bank accounts. Cybercrime also includes non-monetary offenses, such as creating and distributing viruses on other computers or posting confidential business information on the Internet. Perhaps the most prominent form of cybercrime is identity theft, in which criminals use the Internet to steal personal information from other users.[6] Perhaps the most complete definition of Cyber-crime is as given [7] "A criminal activity involving an information technology infrastructure, including illegal access (unauthorized access), illegal interception (by technical means of non-public transmissions of computer data to, from or within a computer system), data interference (unauthorized damaging, deletion, deterioration, alteration or suppression of computer data), systems interference (interfering with the functioning of a computer system by inputting, transmitting, damaging, deleting, deteriorating, altering or suppressing computer data), misuse of devices, forgery (ID theft), and electronic fraud".

3.1. Goals of Cyber Security

The following are the objectives of Cyber-security.

- To help people reduce the vulnerability of their Information and Communication Technology (ICT) systems and networks.
- To help individuals and institutions develop and nurture a culture of cyber security.
- To work collaboratively with public, private and international entities to secure cyberspace.
- To help understand the current trends in IT/cybercrime, and develop effective solutions.
- Availability.
- Integrity, which may include authenticity and non-repudiation.
- Confidentiality.

4. E-crimes those are peculiar to Nigeria

There is no doubt that e-crime is an image trauma for Nigeria. Cyber-crime is a source of concern and embarrassment for the nation. The Internet creates unlimited opportunities for commercial, social, and educational activities. But as we can see with cyber-crime the Internet also

introduces its own peculiar risks. The instances reported here ranges from fake lotteries to the biggest internet scams. Elekwe, a chubby-faced 28-year-old man made a fortune through the scam after two years of joblessness despite having diploma in computer science. He was lured to Lagos from Umuahia by the chief of a fraud gang in a business center. He has three sleek cars and two houses from his exploits. In July 2001, four Nigerians suspected to be operating a "419" scam on the internet to dupe unsuspecting foreign investors in Ghana were arrested by security agencies. Their activities are believed to have led to the loss of several millions of foreign currencies by prospective investors. Two young men were recently arrested after making an online purchase of two laptops advertised by a woman on her website under false claims. They were arrested at the point of delivery by government officials. Mike Amadi was sentenced to 16 years imprisonment for setting up a website that offered juicy but phony procurement contracts. The man impersonated the EFCC Chairman, but he was caught by an undercover agent posing as an Italian businessman. The biggest international scam of all was committed by Amaka Anajemba who was sentenced to 2½ years in prison. She was equally ordered to return $25.5 million of the $242 million she helped to steal from a Brazilian bank.

On recent internet scam case was reported on the Sunday PUNCH newspaper of July 16, 2006 involving a 24-year-old Yekini Labaika of Osun State origin in Nigeria and a 42-years-old nurse of American origin, by name Thumbelina Hinshaw, in search of a Muslim lover to marry. The young man deceived the victim by claiming to be an American Muslim by the name, Phillip Williams, working with an oil company in Nigeria and he promised to marry her. He devised dubious means to swindle $16,200 and lots of valuable materials from the victim. The scammer later was sentenced to a total of 19½ years having been found guilty of eight-counts against him. Incidences like these are on the increase. Several young men unabated are still carrying out these illegal acts successfully, ripping off credulous individuals and organizations.[8] Recently, a report indicated that Nigeria is losing about $80 million yearly to software piracy. The report was the finding of a study conducted by Institute of Digital Communication, a market research and forecasting firm, based in South Africa, on behalf of Business Software Alliance of South Africa. The American National Fraud Information Centre reported Nigerian money offers as the fastest growing online scam, up to 90% in 2001. The Centre also ranked Nigerian cyber-crime impact per capita as being exceptionally high.[17]

Those involved are between 18-25 years mostly resident in the urban centers. The internet has help in modernizing fraudulent practices among the youths. Online fraud is seen as the popularly accepted means of economic sustenance by the youths involved. The corruption of the political leadership has enhanced the growth of internet crime subculture. The value placed on wealth accumulation has been a major factor in the involvement of youths in online fraud.[1]

5. Categories of cyber crime

- Hacking: Hackers make use of the weaknesses and loop holes in operating systems to destroy data and steal important information from victim's computer. It is normally done through the use of a backdoor program installed on your machine. A lot of hackers also try to gain access to resources through the use of password hacking software. Hackers can also monitor what u do on your computer and can also import files on your computer. A hacker could install several programs on to your system without your knowledge. Such programs could also be used to steal personal information such as passwords and credit card information. Important data of a company can also be

hacked to get the secret information of the future plans of the company.

- Cyber-Theft: Cyber-Theft is the use of computers and communication systems to steal information in electronic format. Hackers crack into the systems of banks and transfer money into their own bank accounts. This is a major concern, as larger amounts of money can be stolen and illegally transferred. Credit card fraud is also very common. Most of the companies and banks don't reveal that they have been the victims of cyber -theft because of the fear of losing customers and shareholders. Cyber-theft is the most common and the most reported of all cyber-crimes. Cyber-theft is a popular cyber-crime because it can quickly bring experienced cyber-criminal large cash resulting from very little effort
- Viruses and worms is a very major threat to normal users and companies. Viruses are computer programs that are designed to damage computers. It is named virus because it spreads from one computer to another like a biological virus. A virus must be attached to some other program or documents through which it enters the computer. A worm usually exploits loop holes in soft wares or the operating system. Trojan horse is dicey. It appears to do one thing but does something else. The system may accept it as one thing. Upon execution, it may release a virus, worm or logic bomb. A logic bomb is an attack triggered by an event, like computer clock reaching a certain date. Chernobyl and Melissa viruses are the recent examples. Experts estimate that the Mydoom worm infected approximately a quarter-million computers in a single day in January 2004. Back in March 1999, the Melissa virus was so powerful that it forced Microsoft and a number of other very large companies to completely turn off their e-mail systems until the virus could be contained.[16]
- Spamming– involves mass amounts of email being sent in order to promote and advertise products and websites. Email spam is becoming a serious issue amongst businesses, due to the cost overhead it causes not only in regards to bandwidth consumption but also to the amount of time spent downloading/ eliminating spam mail. Spammers are also devising increasingly advanced techniques to avoid spam filters, such as permutation of the emails contents and use of imagery that cannot be detected by spam filters.
- Financial Fraud- These are commonly called "Phishing' scams, and involve a level of social engineering as they require the perpetrators to pose as a trustworthy representative of an organization, commonly the victim's bank.
- Identity Theft, Credit Card Theft, Fraudulent Electronic Mails (Phishing): Phishing is an act of sending an e-mail to a user falsely claiming to be an established legitimate enterprise in order to scam the user into surrendering private information that will be used for identity theft.
- Cyber harassment- is electronically and intentionally carrying out threatening acts against individuals. Such acts include cyber-stalking.
- Cyber laundering- is an electronic transfer of illegally-obtained monies with the goal of hiding its source and possibly its destination.
- Website Cloning: One recent trend in cyber-crime is the emergence of fake 'copy-cat' web sites that take advantage of consumers what are unfamiliar with the Internet or who do not know the exact web address of the legitimate company that they wish to visit. The consumer, believing that they are entering credit details in order to purchase goods from the intended company, is instead unwittingly entering details into a fraudster's personal database. The fraudster is then able to make use of this information at a later stage, either for his own purposes or to sell on to others interested in perpetrating credit card fraud.

6. Emerging cyber tricks in Nigeria

- **Beneficiary of a Will Scam**: The criminal sends e-mail to claim that the

victim is the named beneficiary in the will of an estranged relative and stands to inherit an estate worth millions.

- **Online Charity**: Another aspect of e-crime common in Nigeria is where fraudulent people host websites of charity organizations soliciting monetary donations and materials to these organizations that do not exist. Unfortunately, many unsuspecting people have been exploited through this means.
- **Next of Kin Scam**: Collection of money from various bank and transfer fees by tempting the victim to claim an inheritance of millions of dollars in a Nigerian bank belonging to a lost relative.
- **The "Winning Ticket in Lottery you Never Entered" Scam:** These scams lately include the State Department's green card lottery.
- **Bogus Cashier's Check**: The victim advertises an item for sale on the Internet, and is contacted
- **Computer/Internet Service Time Theft**: Whiz kids in Nigeria have developed means of connecting Cyber Cafes to Network of some ISPs in a way that will not be detected by the ISPs and thereby allow the Cafes to operate at no cost.
- **Lottery scam:** allowing users believe they are beneficiaries of an online lottery that is in fact a scam.[18]

7. Challenges of cybercrime

- Tunji Ogunleye, an ICT security consultant and a member of Nigeria Cyber Crime Working Group (NCWG) disclosed that the rate of e-crime in Nigeria has outgrown the rate of Internet usage in the country. He said Nigeria is the 56th out of 60 countries embracing Internet usage but third in the fraud attempt category. We are tempted to ask why there is such an upsurge of e-crime in Nigeria and what are the factors that made Nigerians so vulnerable to e-crime?
- **Domestic and international law enforcement**: A hostile party using an Internet connected computer thousands of miles away can attack internet- connected computers in Nigeria as easily as if he were next door. It is often difficult to identify the perpetrator of such an attack, and even when a perpetrator is identified, criminal prosecution across national boundaries is problematic.
- **Unemployment**: The spate of unemployment in Nigeria is alarming and growing by the day. Companies are folding up and financial institutions are going bankrupt. The federal government has proposed a mass sack of government workers. Companies are also embarking on mass sacks of staff. Financial institutions have put unreasonable age barriers on who is eligible to apply for jobs and embarked on mass lay-offs of staff based on ad-hoc decisions.
- **Poverty Rate**: On the global scale, Nigeria is regarded as a third world country. The poverty rate is ever increasing. The rich are getting richer and the poor are getting poorer. Insufficient basic amenities and an epileptic power supply have grounded small scale industries.
- **Corruption**: Nigeria was ranked third among the most corrupt countries in the world. Until 1999, corruption was seen as a way of life in Nigeria.
- **Lack of Standards and National Central Control**: Charles Emeruwa, a consultant to Nigeria Cyber Crime Working Group (NCCWG), said lack of regulations, standards and computer security and protection act are hampering true e-business. Foreign Direct Investment (FDI) and foreign outsourcing are encouraging computer misuse and abuse.
- **Lack of Infrastructure**: Proper monitoring and arrest calls for sophisticated state of the art Information and Communication Technology devices.
- **Lack of National Functional Databases**: National database could serve as a means of tracking down the perpetrators of these heinous acts by

checking into past individual records and tracing their movements.

- **Proliferation of Cybercafés**: As a means of making ends meet, many entrepreneurs have taken to establishment of cybercafés that serve as blissful havens for the syndicates to practice their acts through night browsing service they provide to prospective customers without being guided or monitored.
- **Porous Nature of the Internet**: The Internet is free for all with no central control. Hence, the state of anarchy presently experienced.

7.1. Complexities of Cybercrime

- The speed and power of modern information technology complicates the detection and investigation of computer crimes. For example, communications networks now span the globe and a small personal computer can easily connect to sites that are located in different hemispheres or continents. This raises very significant problems in terms of jurisdiction, availability of evidence, co-ordination of the investigation and the legal framework(s) that can be applied to criminal acts that occur in this context.
- New technologies create new concepts that have no legal equivalence or standing. Nevertheless, a virus utilizes the resources of the infected system without the owner's permission. Hence, even a benign virus may be variously interpreted as a system penetration, a piece of electronic graffiti or simply a nuisance prank. The major point however, is that the legal system and therefore the definition of computer crime itself is reactive and unable to encompass behaviors or acts that involve new computational concepts.
- Information has several unique and abstract properties - for example its capacity to still be in the owner's possession after it has been copied or stolen. The last decade has seen the legal system struggle with the implications of this in a computer based context. Clearly, conventional notions of copyright, patent rights and theft have been strained when applied to software and computer based information, basically because existing concepts of theft and break-in for example, relate to common notions of permanent deprivation or removal (theft) or physical damage (break-ins).
- A related property of digital information is the ease and extent to which it can be transformed and translated. That is, a piece of information (i.e., a program) can be represented in a huge variety of informational forms. It can be represented as program text (source code), executable code (binaries), or it can be transformed in a large number of ways - mathematically, by encryption, or by conversion to say a holographic image or a piece of music. As long as the method(s) of transformation are known, the music, image, or encrypted text can be translated back to its original form. Therefore, the informational form in which information exists may eventually have no legal status. Instead, some measure of its value or functionality as information itself may eventually determine its legal and commercial position.
- This malleability of information has implications in terms of system break-ins where information may not be destroyed (as in corrupted or erased) but is encrypted or made temporarily inaccessible. Such actions can hardly be classified as theft or even malicious damage.[11]

7.2. Effects of Cyber Crime

- Financial loss: Cybercriminals are like terrorists or metal thieves in that their activities impose disproportionate costs on society and individuals.
- Loss of reputation: most companies that have been defrauded or reported to have been faced with cybercriminal activities complain of clients losing faith in them.

- Reduced productivity: this is due to awareness and more concentration being focused on preventing cybercrime and not productivity.
- Vulnerability of their Information and Communication Technology (ICT) systems and networks.

8. Solutions to cybercrime

- Education: Cybercrime in Nigeria is difficult to prove as it lacks the traditional paper audit trail, which requires the knowledge of specialists in computer technology and internet protocols; hence We need to educate citizens that if they are going to use the internet, they need to continually maintain and update the security on their system. We also need to educate corporations and organizations in the best practice for effective security management. For example, some large organizations now have a policy that all systems in their purview must meet strict security guidelines. Automated updates are sent to all computers and servers on the internal network, and no new system is allowed online until it conforms to the security policy.
- Establishment of Programs and IT Forums for Nigerian Youths: Since the level of unemployment in the country has contributed significantly to the spate of e-crime in Nigeria, the government should create employments for these youths and set up IT laboratories/forum where these youths could come together and display their skills. This can be used meaningfully towards developing IT in Nigeria at the same time they could be rewarded handsomely for such novelty.
- Address Verification System: Address Verification System (AVS) checks could be used to ensure that the address entered on your order form (for people that receive orders from countries like United States) matches the address where the cardholder's billing statements are mailed.
- Interactive Voice Response (IVR) Terminals: This is a new technology that is reported to reduce charge backs and fraud by collecting a "voice stamp" or voice authorization and verification from the customer before the merchant ships the order.
- IP Address tracking: Software that could track the IP address of orders could be designed. This software could then be used to check that the IP address of an order is from the same country included in the billing and shipping addresses in the orders.
- Use of Video Surveillance Systems: The problem with this method is that attention has to be paid to human rights issues and legal privileges.
- Antivirus and Anti spyware Software: Antivirus software consists of computer programs that attempt to identify, thwart and eliminate computer viruses and other malicious software. Anti-spy wares are used to restrict backdoor program, Trojans and other spy wares to be installed on the computer.
- Firewalls: A firewall protects a computer network from unauthorized access. Network firewalls may be hardware devices, software programs, or a combination of the two. A network firewall typically guards an internal computer network against malicious access from outside the network.
- Cryptography: Cryptography is the science of encrypting and decrypting information. Encryption is like sending a postal mail to another party with a lock code on the envelope which is known only to the sender and the recipient.[20] A number of cryptographic methods have been developed and some of them are still not cracked.
- Cyber Ethics and Cyber legislation Laws: Cyber ethics and cyber laws are also being formulated to stop cyber-crimes. It is a responsibility of every individual to follow cyber ethics and cyber laws so that the increasing cyber-crimes will reduce. Security software like anti viruses and anti-spy wares should be installed on all computers, in order to remain secure from cyber-crimes. Internet

Service Providers should also provide high level of security at their servers in order to keep their clients secure from all types of viruses and malicious programs.[7]

9. Conclusion and recommendations

As the general population becomes increasingly refined in their understanding and use of computers and as the technologies associated with computing become more powerful, there is a strong possibility that cyber-crimes will become more common. Nigeria is rated as one of the countries with the highest levels of e-crime activities. Cyber security must be addressed seriously as it is affecting the image of the country in the outside world. A combination of sound technical measures tailored to the origin of Spam (the sending ends) in conjunction with legal deterrents will be a good start in the war against cyber criminals. Information attacks can be launched by anyone, from anywhere. The attackers can operate without detection for years and can remain hidden from any counter measures". This indeed emphasizes the need for the government security agencies to note that there is need to keep up with technological and security advancements. It will always be a losing battle if security professionals are miles behind the cyber criminals. Fighting cybercrime requires a holistic approach to combat this menace in all ramifications. There is need to create a security-aware culture involving the public, the ISPs, cybercafés, government, security agencies and internet users. Also in terms of strategy, it is crucial to thoroughly address issues relating to enforcement. Mishandling of enforcement can backfire.

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The focus of work at the conference in 2013:

№	Scientific field
1	Methodological foundations of innovative activity in education
2	Design and formation of educational environment in the context of education modernization
3	Psychological and pedagogical foundations of innovative technologies in education
4	Psychological support of innovative activity
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8	Innovative potential of educators and psychologists: intellectual and personal characteristics
9	Innovative approaches to education for persons with disabilities
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